AGRICULTURAL STATISTICS, IRELAND.

GENERAL ABSTRACTS

SHOWING

THE ACREAGE UNDER THE SEVERAL CROPS,

AND THE

NUMBER OF LIVE STOCK

IN

EACH COUNTY AND PROVINCE,

FOR THE YEAR

1875.

ALSO THE NUMBER OF SCUTCHING MILLS IN EACH PROVINCE IN 1874,
AND THE EMIGRATION FROM IRISH PORTS FROM 1st JANUARY.
TO 30TH JUNE, IN 1874 AND 1875,

WITH AN

APPENDIX CONTAINING INFORMATION REGARDING THE
EXTIRPATION OF WEEDS.

Presented to both Houses of Parliament by Command of Her Majesty.

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1875.

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AGRICULTURAL STATISTICS, IRELAND, 1875.

TO HIS GRACE, JAMES, DUKE OF ABERCORN, K.G.,

&c., &c., &c.,

LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR OF IRELAND.

MAY IT PLEASE YOUR GRACE,

I had the honour of submitting, on the 30th ultimo, a Return by Counties of the acreage under Flax in the years 1874 and 1875, with the number of Scutching Mills in 1874. I now beg to submit the annual General Abstracts, which give, as usual, by Counties and Provinces, the entire area under each description of Crop; also the total number of Live Stock, and their estimated value.

The Emigration from Ireland, during the first *six* months of 1874 and 1875, is also given.

The collection of the Agricultural Statistics, which commenced on the 1st of June, occupied nearly two months. The Enumerators, of whom nearly 3,800 were employed, were selected from the Royal Irish Constabulary and Metropolitan Police, and, I need scarcely observe, discharged this duty with their usual efficiency. The various Holdings, which amount in all to about 600,000, were visited by them, and *the names of the several parties from whom the particulars of Tillage and Live Stock for each Holding were obtained, are stated on the Returns, with a view to further inquiry in any case, should it be found necessary.*

Success of the Enumeration.

The information given to the Enumerators is altogether voluntary; and I feel assured it will afford pleasure to your Grace to learn, as, I beg to say, it is most gratifying to have it in my power to state, that so far as I am informed by the Officers who acted as Superintendents of Districts, the required Returns have been collected without difficulty, except in a few cases, in which, on a written application being made by me, the particulars were courteously supplied, one landed proprietor only, occupying about 400 acres in the province of Leinster, declining to permit his steward to furnish any information—this being the sole exception in all Ireland. The readiness with which these statistics are obtained is highly creditable to the good feeling and intelligence of all ranks and classes connected with land in this country, and affords an example well deserving of imitation in England.

The Abstracts have been carefully compiled from summaries made by the Enumerators, for their respective districts. They may differ in some degree from the revised figures which will be hereafter published; but I do not apprehend that any changes of importance will become necessary.

Extent under Crops.

The total acreage under all Crops this year was . . . 5,331,655 acres
The do. do. do. in 1874 . . . . 5,269,004 „

Showing an increase in the extent under Crops in 1875 of : 62,651 „

Increase in Cereals and Green Crops.

The Crops which *increased* in extent this year are—

		Increase. Acres.	Acres.
Cereals,	Oats,	18,474	
	Barley,	22,139	
	Bere and Rye,	411	41,280
	Beans and Pease,	256	
Green Crops,	Potatoes,	7,852	
	Mangel and Beet Root,	4,947	
	Cabbage,	1,690	
	Carrots, Parsnips, and other Green Crops,	2,490	17,248
	Vetches and Rape,	269	
	Meadow and Clover,		37,244
	Total *Increase* on the foregoing Crops,		95,772

Decrease in Cereals, Green Crops and Flax.

The Crops which *decreased* in acreage in 1875 are—

	Acres.
Wheat,	26,657
Turnips,	805
Flax,	5,659
Total *Decrease* in the foregoing Crops,	33,121
Total *Increase* in the area under Crops,	95,772

Making a Net *Increase* in the area under all Crops of 62,651 Acres.

Crops of 1875 compared with Crops of 1874.

It appears from the foregoing summaries that, compared with 1874, oats show an increase of 18,474 acres, barley of 22,139 acres, bere and rye of 411 acres, beans and pease of 256 acres, potatoes of 7,852 acres, mangel and beet root of 4,947 acres, cabbage of 1,690 acres, carrots, parsnips, and other green crops of 2,490 acres, vetches and rape of 269 acres, and meadow and clover 37,244 acres.

In wheat there is a decrease of 26,657 acres, turnips of 805 acres, and flax of 5,659 acres.

Abstract of Cereal Crops.

	1874. Acres.	1875. Acres.	Increase in 1875. Acres.	Decrease in 1875. Acres.
Wheat,	187,978	161,321	—	26,657
Oats,	1,480,897	1,499,371	18,474	—
Barley,	211,608	233,747	22,139	—
Bere and Rye,	9,901	10,312	411	—
Beans and Pease,	11,391	11,647	256	—
Total,	1,901,775	1,916,398	14,623	—

Increase in Cereal Crops in 1875, . 14,623 Acres.

ABSTRACT OF GREEN CROPS.

	1874.	1875.	Increase in 1875.	Decrease in 1875.
	Acres.	Acres.	Acres.	Acres.
POTATOES, ...	892,425	900,277	7,852	—
TURNIPS, ...	333,588	332,783	—	805
MANGEL WURZEL AND BEET ROOT, ...	38,327	43,274	4,947	—
CABBAGE, ...	33,184	34,874	1,690	—
CARROTS, PARSNIPS, AND OTHER GREEN CROPS, .	34,694	37,184	2,490	—
VETCHES AND RAPE, . .	21,425	21,694	269	—
TOTAL, ...	1,353,643	1,370,086	16,443	—

Increase in Green Crops in 1875, . 16,443 Acres.

GENERAL SUMMARY OF CEREAL AND GREEN CROPS, &c.

	Acres.	Acres.
Increase in Cereal Crops in 1875, .	41,280	
Do. Green Crops in do. .	17,248	95,772
Do. Meadow and Clover in do. .	37,244	
Decrease in Wheat, Turnips, and Flax in do. . . .		33,121
Total *Increase* in the extent of *Land under Crops* in 1875, .		62,651

The total extent under Crops, Grass, Fallow, Woods and Plantations, and of Bog and Waste in 1874 and 1875, is given by Provinces in the following Table:— Division of Land.

PROVINCES.		Extent under Crops.	Grass.	Fallow.	Woods and Plantations.	Bog and Waste.*	Total.
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
LEINSTER,	1874,	1,466,809	2,636,970	4,377	100,646	621,363	4,830,165
	1875,	1,492,955	2,627,655	3,912	99,689	607,780	
MUNSTER,	1874,	1,272,288	3,423,055	2,372	109,146	1,125,406	5,932,267
	1875,	1,286,543	3,418,871	1,922	105,207	1,119,611	
ULSTER,	1874,	1,812,849	2,288,833	3,620	60,379	1,141,938	5,307,619
	1875,	1,833,210	2,285,040	3,824	61,345	1,123,910	
CONNAUGHT,	1874,	717,058	2,123,564	1,733	52,097	1,332,856	4,227,308
	1875,	718,947	2,100,210	1,629	52,027	1,354,310	
TOTAL,	1874,	5,269,004	10,472,422	12,102	322,268	4,221,563	20,297,359 †
	1875,	5,331,655	10,431,776	11,287	318,268	4,205,611 *	

* Under this head is included the area of barren mountains, roads, towns, and tideways; also all water except that of the larger rivers and lakes.

† Exclusive of the larger rivers, lakes, and tideways.

The area under the several Crops in each year from 1871 to 1875, inclusive, was as under:—

Crops.	1871.	1872.	1873.	1874.	1875.
	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat,	244,451	225,294	167,554	187,978	161,321
Oats,	1,636,136	1,624,711	1,510,972	1,480,897	1,499,371
Barley,	220,979	219,013	230,115	211,608	233,747
Bere and Rye,	11,555	9,975	9,224	9,901	10,312
Beans and Pease,	10,913	11,821	12,873	11,391	11,647
Potatoes,	1,058,434	991,871	903,262	892,425	900,277
Turnips,	327,035	346,711	347,848	333,588	332,783
Mangel and Beet Root,	31,921	34,832	38,231	38,327	43,274
Cabbage,	33,008	39,452	28,115	33,184	34,874
Carrots, Parsnips, and other Green Crops,	29,869	31,196	31,590	34,694	37,184
Vetches and Rape,	31,422	30,172	23,417	21,425	21,694
Flax,	156,670	121,992	129,297	106,907	101,248
Meadow and Clover,	1,829,044	1,800,273	1,838,248	1,906,679	1,943,923

ive Stock.

Returns of Live Stock.

It appears from the following Table that the Returns of Live Stock for 1875, when compared with 1874, show an *increase* in the number of Horses and Mules of 304, of Pigs of 150,049, and of Goats of 12,141; and a *decrease* in Asses of 688, in Cattle of 12,766, in Sheep of 193,540, and in Poultry of 12,607.

umber of ive Stock.

The following are the numbers of Live Stock for each year from 1865 to 1875, inclusive:—

Years.	Horses and Mules.	Asses.	Cattle.	Sheep.	Pigs.	Goats.	Poultry.
1865,	563,142	160,009	3,497,548	3,694,356	1,305,953	171,207	10,681,955
1866,	555,647	173,175	3,746,157	4,274,262	1,497,274	106,880	10,889,747
1867,	548,686	167,233	3,707,803	4,835,519	1,235,191	190,429	10,334,309
1868,	544,372	169,100	3,646,790	4,901,496	869,578	199,060	10,602,762
1869,	547,757	171,664	3,733,675	4,651,195	1,082,224	205,861	10,801,687
1870,	552,216	178,717	3,799,912	4,336,884	1,461,215	211,891	11,159,002
1871,	557,912	180,373	3,976,372	4,233,435	1,621,423	231,573	11,717,183
1872,	566,804	181,351	4,059,397	4,263,254	1,388,571	238,961	11,737,529
1873,	552,338	177,779	4,147,102	4,484,520	1,044,454	242,689	11,863,155
1874,	547,372	180,430	4,124,756	4,441,690	1,099,186	256,753	12,068,375
1875,	547,676	179,742	4,111,990	4,248,158	1,249,235	268,894	12,055,768
Difference in Numbers between 1874 and 1875,	Increase, 304	Decrease, 688	Decrease, 12,766	Decrease, 193,540	Increase, 150,049	Increase, 12,141	Decrease, 12,607

Table showing by Provinces the Number of Thoroughbred and other Sires in Ireland in the Year 1875,

According to the description given of them by the Owners or their Grooms.

Breed.	Province of				Total of Ireland.
	Leinster.	Munster.	Ulster.	Connaught.	
Thoroughbred:					
Bred in Ireland, . .	80	91	50	33	254
Imported, . . .	54	54	28	13	149
Total, . .	134	145	78	46	403
Half-bred:					
Bred in Ireland, . .	149	161	160	60	530
Imported, . . .	1	3	7	1	12
Total, . .	150	164	167	61	542
Clydesdale:					
Bred in Ireland, . .	55	27	63	16	161
Imported, . . .	12	11	19	3	45
Total, . .	67	38	82	19	206
Suffolk Punch:					
Bred in Ireland, . .	31	32	24	13	100
Imported, . . .	6	10	6	4	26
Total, . .	37	42	30	17	126
Draught Horse:					
Bred in Ireland, . .	53	42	10	29	134
Imported, . . .	3	1	–	–	4
Total, . .	56	43	10	29	138
All Others: *					
Bred in Ireland, . .	7	5	21	16	49
Imported, . . .	5	1	5	1	12
Total, . .	12	6	26	17	61
Total:					
Bred in Ireland, . .	375	358	328	167	1,228
Imported, . . .	81	80	65	22	248
General Total,	456	438	393	189	1,476

* Under the heading "All others," in this Table, are included 8 *Cobs*, 1 *Norwegian Pony*, 1 *Lincoln*, 5 *Cleveland*, 2 *Arabian Ponies*, 2 *Shetland Ponies*, 2 *Arabian*, 3 *Norways*, 2 *Highland Ponies*, 1 *Scotch Pony*, 1 *Highland*, 1 *Dutch*, 10 *Ponies*, 1 *Norfolk Trotter*, 1 *Ayrshire*, 1 *Flemish*, 1 *Norfolk*, 2 *Welsh*, 9 *Connemara Ponies*, and 1 *Scotch Cob*. There are also 6 Sires included in the Table, the breed of which is stated to be *unknown*.

lue of ve Stock.

The *total* value of horses, mules, asses, cattle, sheep, pigs, goats, and poultry this year, estimated at the former low prices, is £37,925,832, being a decrease of £102,329 when compared with 1874, as appears by the following Table :—

ESTIMATED VALUE of LIVE STOCK in IRELAND in each Year from 1865 to 1875, inclusive, calculated *according to the rates assumed by the Census Commissioners of* 1841, viz. :—For Horses and Mules, £8 each; Asses, £1; Cattle, £6 10*s.*; Sheep, £1 2*s.*; Pigs, £1 5*s.*; Goats, 7*s.* 6*d.*; and Poultry, 6*d.* each. [*These rates have been retained since* 1841, *in order to facilitate a comparison of the value—one year with another. A per-centage may be added by anyone at pleasure on account of the greatly increased value of live stock since that period.*]

YEARS.	Horses and Mules, at £8 each.	Asses, at £1 each.	Cattle, at £6 10*s.* each.	Sheep, at £1 2*s.* each.	Pigs, at £1 5*s.* each.	Goats, at 7*s.* 6*d.* each.	Poultry, at 6*d.* each.	Total Value.
	£	£	£	£	£	£	£	£
1865, . . .	4,545,136	168,009	22,734,062	4,063,792	1,632,441	64,203	267,049	33,474,692
1866, . . .	4,445,176	173,175	24,350,020	4,791,710	1,871,593	70,080	272,244	35,883,998
1867, . . .	4,349,488	167,233	24,100,719	5,319,071	1,543,989	71,411	258,358	35,810,269
1868, . . .	4,354,976	169,100	23,704,174	5,391,646	1,086,972	74,647	265,070	35,046,585
1869, . . .	4,382,056	171,664	24,268,888	5,116,314	1,352,780	77,198	270,042	35,638,943
1870, . . .	4,417,728	173,717	24,699,428	4,770,572	1,826,519	79,459	278,975	36,246,398
1871, . . .	4,463,296	180,373	25,846,418	4,656,779	2,026,778	86,765	292,929	37,553,338
1872, . . .	4,486,432	181,351	26,386,081	4,689,579	1,735,714	89,610	293,438	37,862,205
1873, . . .	4,418,704	177,779	26,956,163	4,932,972	1,305,567	91,008	296,579	38,178,772
1874, . . .	4,378,976	180,430	26,810,914	4,885,868	1,373,982	96,282	301,709	38,028,161
1875, . . .	4,381,408	179,742	26,727,935	4,672,974	1,561,544	100,835	301,394	37,925,832
Difference in value between 1874 and 1875, . . .	Increase, £2,432	Decrease, £688	Decrease, £82,979	Decrease, £212,894	Increase, £187,562	Increase, £4,553	Decrease, £315	Decrease, £102,329

tching ls.

Scutching Mills.—The number of Mills for scutching Flax in each province in 1874, was—In Ulster, 1,295;—Leinster, 25;—Munster, 31;—Connaught, 29;—making in all 1,380.

gration.

Emigration.—In the first *six* months of 1874 the Returns of Emigrants from the several ports of Ireland show that 45,781 persons left this country. The number for the same period in 1875 was 31,095, being a *decrease* of 14,686 persons in the first half of this year. The emigration referred to is given by months for 1874 and 1875 at page 22.

urers' lings.

Labourers' Dwellings.—It is impossible, both on social and sanitary grounds, to exaggerate the importance of improving the dwellings of the labouring classes in Ireland; the Legislature has enabled the Treasury to grant loans for this most desirable object through the medium of the Board of Public Works, Dublin. According to the Census of 1871, the number of *fourth-class houses* in Ireland, most of which had only *one room for the entire family of* EVERY AGE AND SEX, was ascertained to be very considerable, and in these were living nearly *half a million* of persons.

On this important subject I beg to quote the following words as reported to have been spoken by your Grace at the Lord Mayor's Banquet, on the 3rd of February last:—

* * * *

"I believe that at the present moment the average wages of the agricultural "labourer in most parts of Ireland are fully 10*s.* a week, and I know of some

"places where they are more; and though, notwithstanding this increase of "wages, which, comparing the prices of the two countries, are fully equal to "12*s.* in England, we have still a large drain of emigration to lament; yet it is "satisfactory to know that during the past year the number of persons emi-"grating has decreased by, I believe, something like 17,000 persons. But, my "lord, *I am strongly of opinion that the unsuitable dwelling of the agricultural "labourer in this country is a stronger reason for his desiring to seek his fortune "in a foreign country than any deficiency of wages; and I trust that simultaneously "with the increase of wages a more suitable style of dwelling—one more in accord-"ance with the rising wealth of the country—may be in store for the agricultural "labourer of the future.*"

These words of your Grace cannot fail to attract general attention to the present condition of too many of the dwellings of the agricultural labourers in Ireland.

Weeds. *Weeds.*—Although very great improvement in the breeds and value of every description of Farm Stock has been effected in Ireland, it must be admitted that a corresponding improvement has not taken place in the cultivation of the land. On several occasions I have felt it my duty to solicit public attention to the *incalculable injury* arising from the unchecked growth of weeds which is, unhappily, permitted in almost every part of the country, and also along the sides of roads, railways, and canals. On this subject I have now given extracts from former Abstracts containing valuable information from the writings of Sir John Sinclair and other eminent persons, which I trust will prove useful to those engaged in the cultivation of land. I have also appended some extracts respecting the vast injury and great pecuniary loss (estimated at nearly two millions sterling) caused by weeds in Ireland from that valuable publication, the "Leisure Hour," in its number for May and June of last year, together with two articles on the subject which appeared in the "Freeman's Journal." At the annual meeting in 1872 of the Royal Agricultural Society in Belfast, the noble President, Lord Lurgan, K.P., referred to "the "necessity of acting on the suggestions thrown out in the Reports "of the Registrar-General in relation to the extirpation of weeds. "They did a deal of mischief, and he thought they should carry "out the sentence which the old Scotch law pronounced, declaring "anyone to be a TRAITOR WHO POISONED THE QUEEN'S LAND WITH "WEEDS."

I again beg to repeat my most respectful acknowledgments to the landed proprietors, tenant farmers, the clergy of all denominations, and to the public press in Ireland, for a continuance of the same generous and valuable assistance which I have now for so many years experienced in connexion with these Statistics.

I have the honour to be

Your Grace's very faithful servant,

WILLIAM DONNELLY,

Registrar-General.

General Register Office,
Charlemont House, Dublin,
13th August, 1875.

TABLE showing, in Statute Acres, the extent of Land under

Number.	Provinces and Counties, with their Areas in Statute Acres.	Extent of Land under						
		Wheat.	Oats.	Barley.	Bere and Rye.	Beans and Pease.	Potatoes.	Turnips.
	Leinster:	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1	Carlow, . . 1874, 221,343 acres, 1875,	3,594 2,748	21,334 22,165	5,242 6,748	10 7	2 2	9,985 10,354	5,015 5,189
2	Dublin, . . 1874, 226,895 acres, 1875,	7,776 6,185	15,512 15,963	2,170 2,840	124 155	104 149	9,921 10,163	2,292 2,405
3	Kildare, . . 1874, 418,497 acres, 1875,	2,772 2,365	26,335 27,618	15,257 16,502	200 310	8 5	9,856 9,503	12,224 12,968
4	Kilkenny, . . 1874, 507,254 acres, 1875,	13,893 11,590	36,836 36,306	15,172 18,678	54 30	4 .	19,061 19,295	10,305 10,581
5	King's, . . 1874, 493,019 acres, 1875,	1,653 707	23,570 23,442	14,742 16,026	396 491	5 6	16,054 15,246	10,313 10,297
6	Longford, . . 1874, 257,222 acres, 1875,	811 897	19,061 20,013	38 36	237 318	18 6	13,120 13,563	2,839 2,760
7	Louth, . . 1874, 201,618 acres, 1875,	2,604 1,328	25,630 25,123	21,767 23,786	37 28	260 202	12,631 11,995	9,486 9,643
8	Meath, . . 1874, 578,247 acres, 1875,	3,707 2,804	36,846 36,947	1,778 1,773	135 154	70 50	13,319 12,719	7,635 7,365
9	Queen's, . . 1874, 424,854 acres, 1875,	1,823 880	20,865 20,441	26,289 28,180	53 67	8 10	17,358 16,581	13,522 13,820
10	Westmeath, . 1874, 433,769 acres, 1875,	270 141	25,902 26,500	326 338	142 138	4 7	12,246 11,991	5,846 5,657
11	Wexford, . . 1874, 575,700 acres, 1875,	10,812 10,186	49,358 50,165	48,285 53,258	62 55	3,720 3,302	24,596 25,031	18,193 18,782
12	Wicklow, . . 1874, 499,894 acres, 1875,	5,505 4,458	26,063 25,535	952 1,388	25 23	4 6	11,698 11,854	5,433 5,678
	Total of Leinster, 1874, 4,838,312 acres, 1875,	55,220 44,289	327,312 330,218	152,018 169,553	1,475 1,778	4,205 3,745	169,645 188,265	103,103 105,145
	Increase or *Decrease* in Leinster in 1875,	Decrease, 10,931	Increase, 2,906	Increase, 17,535	Increase, 301	Decrease, 460	Decrease, 1,380	Increase, 2,042

Crops, for each County and Province, in the Years 1874 and 1875.

Crops, in Statute Acres.										
Mangel Wurzel and Beet Root.	Cabbage.	Carrots, Parsnips, and other Green Crops.	Vetches and Rape.	Flax.	Meadow and Clover.	Total Extent under Crops.	Fallow or Uncropped Arable Land.	Years.	Population in 1871.	Number.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		LEINSTER:	
834	777	525	52	1	31,027	78,998	25	1874	51,650	1
882	789	541	55	7	32,151	81,638	48	1875		
722	911	2,550	173	.	47,974	00,229	139	1874	405,262	2
768	898	2,361	184	.	51,001	93,072	318	1875		
1,288	229	828	396	1	54,720	123,912	361	1874	83,614	3
1,398	234	945	321	1	57,527	129,697	205	1875		
1,524	1,485	811	229	4	62,315	161,693	1,663	1874	109,379	4
1,935	1,753	835	339	2	82,062	163,406	1,569	1875		
1,621	339	899	753	27	47,099	117,471	212	1874	75,900	5
1,821	429	050	745	16	47,437	117,622	136	1875		
320	801	321	66	380	36,628	74,040	78	1874	64,501	6
373	850	315	103	227	37,641	77,102	26	1875		
470	182	742	532	588	22,968	97,807	87	1874	84,021	7
488	180	875	603	244	23,057	97,552	60	1875		
1,283	306	1,592	044	50	79,554	140,925	082	1874	95,558	8
1,386	304	1,575	467	26	83,325	148,805	553	1875		
2,099	599	760	103	.	59,511	143,059	172	1874	79,771	9
2,374	609	835	169	.	59,275	143,211	437	1875		
965	593	873	055	43	49,932	97,797	138	1874	78,432	10
1,008	810	852	527	20	51,019	99,408	116	1875		
3,641	1,358	1,364	241	9	60,523	222,182	444	1874	132,666	11
3,809	1,423	1,219	235	2	61,649	228,916	356	1875		
969	489	737	105	5	80,041	112,020	376	1874	78,697	12
1,135	560	788	128	.	60,883	112,436	88	1875		
15,738	8,069	12,011	4,009	1,114	812,892	1,466,809	4,377	1874	Total of LEINSTER, 1,339,451	
17,177	8,639	12,100	3,876	545	827,627	1,492,955	3,012	1875		
Increase, 1,441	Increase, 570	Increase, 89	Decrease, 133	Decrease, 569	Increase, 14,735	Increase, 26,146	Decrease, 465		*Increase* or *Decrease* in LEINSTER in 1875.	

[*continued on page* 12.

TABLE showing, in Statute Acres, the extent of Land under Crops,

Number.	Provinces and Counties, with their Areas in Statute Acres.	Extent of Land under						
		Wheat.	Oats.	Barley.	Bere and Rye.	Beans and Pease.	Potatoes.	Turnips.
	Munster:	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1	Clare, . . 768,205 acres,	1874, 5,324	16,111	2,337	628	149	28,449	6,657
		1875, 3,296	17,354	2,130	664	270	28,459	6,339
2	Cork, E.R., 1,031,658 acres,	1874, 16,799	84,701	14,784	63	30	41,682	28,191
		1875, 16,997	85,245	16,346	97	28	42,764	28,535
3	Cork, W.R., 807,263 acres,	1874, 6,806	27,974	5,850	40	5	30,062	11,368
		1875, 6,914	28,200	5,206	109	7	30,980	11,340
4	Kerry, . . 1,159,356 acres,	1874, 1,489	25,504	3,950	683	5	29,848	6,111
		1875, 1,311	24,664	4,332	647	14	30,411	6,512
5	Limerick, . . 662,973 acres,	1874, 11,141	22,405	3,648	88	15	25,732	6,468
		1875, 6,990	24,088	4,017	49	10	25,630	6,419
6	Tipperary, N.R., 512,242 acres,	1874, 4,444	24,485	10,120	125	12	18,093	13,086
		1875, 3,442	25,301	11,887	141	5	18,032	12,995
7	Tipperary, S.R., 536,726 acres,	1874, 11,118	32,463	1,263	50	3	19,734	8,572
		1875, 11,079	32,786	1,359	38	11	20,362	8,556
8	Waterford, . 456,197 acres,	1874, 13,567	25,849	1,243	124	40	15,631	8,082
		1875, 12,995	26,930	1,440	126	23	16,219	7,823
	Total of Munster, 5,934,680 acres,	1874, 70,688	259,492	43,201	1,807	259	209,231	88,535
		1875, 63,024	264,568	46,717	1,871	368	212,857	88,519
	Increase or *Decrease* in Munster in 1875,	De-crease, 7,664	In-crease, 5,076	In-crease, 3,510	In-crease, 64	In-crease, 109	In-crease, 3,626	De-crease, 16
	Connaught:							
1	Galway, . . 1,501,745 acres,	1874, 8,302	55,807	4,487	1,645	70	52,254	16,009
		1875, 5,186	57,485	5,082	1,676	35	52,311	15,387
2	Leitrim, . . 376,212 acres,	1874, 67	13,797	12	191	5	20,003	862
		1875, 61	12,712	11	216	1	20,453	733
3	Mayo, . . 1,318,129 acres,	1874, 2,161	68,125	2,261	1,866	47	60,089	12,249
		1875, 1,122	69,543	1,849	1,811	19	61,545	12,420
4	Roscommon, . 585,407 acres,	1874, 711	32,858	84	490	3	31,495	5,089
		1875, 490	30,945	113	634	1	31,437	4,605
5	Sligo, . . 451,129 acres,	1874, 764	29,427	1,407	135	4	24,144	3,796
		1875, 559	29,003	986	210	4	24,876	3,738
	Total of Connaught, 4,232,622 acres,	1874, 12,005	200,014	8,251	4,327	129	187,985	38,005
		1875, 7,418	199,688	8,041	4,547	60	190,622	36,883
	Increase or *Decrease* in Connaught in 1875,	De-crease, 4,587	De-crease, 326	De-crease, 210	In-crease, 220	De-crease, 69	In-crease, 2,637	De-crease, 1,122

for each County and Province, in the Years 1874 and 1875—*continued.*

Crops, in Statute Acres.							Fallow or Uncropped Arable Land.	Years.	Population in 1871.	Number.
Mangel Wurzel and Beet Root.	Cabbage.	Carrots, Parsnips, and other Green Crops.	Vetches and Rape.	Flax.	Meadow and Clover.	Total Extent under Crops.				
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		Munster:	
1,374	1,715	668	89	287	62,647	146,415	32	1874	147,684	1
1,646	1,694	679	51	243	64,927	147,754	63	1675		
4,191	1,362	1,767	2,289	174	103,961	300,014	689	1674	343,644	2
4,610	1,522	1,836	2,274	54	104,651	304,959	356	1675		
1,363	1,395	1,320	1,391	546	42,737	130,669	447	1874	176,232	3
1,705	1,249	1,362	1,341	324	42,216	130,973	477	1675		
1,361	2,732	612	276	245	63,240	156,056	52	1674	196,586	4
1,559	3,309	500	232	259	63,573	157,323	135	1675		
1,571	1,463	794	163	41	106,634	160,163	377	1674	191,936	5
1,600	1,367	634	147	33	109,675	161,259	194	1875		
1,789	1,402	624	430	5	57,246	131,861	134	1674	93,617	6
1,974	1,435	682	426	8	56,426	134,752	157	1675		
1,248	1,554	741	147	4	58,497	135,394	442	1674	123,096	7
1,266	1,802	700	173	4	60,225	138,163	289	1675		
1,774	1,142	946	160	1	22,957	91,516	199	1674	123,310	8
1,911	1,331	766	123	2	21,869	91,360	251	1875		
14,671	12,785	7,472	4,945	1,263	557,919	1,272,286	2,372	1674	Total of Munster,	
16,475	13,509	7,361	4,767	925	565,562	1,286,543	1,922	1675	1,393,485.	
Increase, 1,604	Increase, 724	Decrease, 91	Decrease, 176	Decrease, 356	Increase, 7,643	Increase, 14,255	Decrease, 450		*Increase* or *Decrease* in Munster in 1875.	
									Connaught:	
1,655	1,153	1,222	3,791	44	70,518	216,957	687	1874	246,458	1
2,164	1,349	1,447	3,227	67	73,900	219,316	779	1675		
394	1,412	362	62	362	48,367	83,916	64	1874	95,562	2
320	1,285	367	49	242	44,266	80,758	230	1875		
274	1,858	1,051	469	639	67,848	189,137	679	1674	246,030	3
621	2,131	1,174	744	677	40,696	194,054	263	1875		
477	939	391	787	119	60,549	133,992	138	1874	140,870	4
556	900	469	778	86	60,054	131,088	80	1875		
139	1,177	345	166	317	31,213	93,056	145	1674	115,493	5
128	1,118	338	234	173	32,366	93,731	277	1675		
2,939	6,539	3,371	5,297	1,701	246,495	717,056	1,733	1674	Total of Connaught,	
3,469	6,761	3,635	5,032	1,245	251,306	716,947	1,629	1675	846,213	
Increase, 550	Increase, 242	Increase, 464	Decrease, 265	Decrease, 456	Increase, 4,611	Increase, 1,669	Decrease, 104		*Increase* or *Decrease* in Connaught in 1875.	

[*continued on page* 14.

TABLE showing, in Statute Acres, the extent of Land under Crops,

Number.	Provinces and Counties, with their Areas in Statute Acres.	Extent of Land under						
		Wheat.	Oats.	Barley.	Bere and Rye.	Beans and Pease.	Potatoes.	Turnips.
	Ulster:	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1	Antrim, . . 711,276 acres,	1874, 5,691	80,448	1,031	61	3,262	46,857	10,145
		1875, 5,372	83,066	1,146	04	3,440	48,150	10,471
2	Armagh, . . 313,036 acres,	1874, 7,430	64,450	303	43	687	29,240	7,892
		1875, 7,116	67,106	552	40	968	29,653	8,328
3	Cavan, . . 466,261 acres,	1874, 589	50,724	28	101	12	28,460	3,910
		1875, 525	52,826	40	66	34	28,823	3,742
4	Donegal, . . 1,190,269 acres,	1874, 1,314	96,383	2,811	636	645	47,016	17,239
		1875, 864	96,393	3,139	557	855	47,694	17,083
5	Down, . . 611,937 acres,	1874, 26,884	119,508	517	190	1,277	52,884	20,254
		1875, 26,214	123,805	579	242	1,114	54,553	19,334
6	Fermanagh, . 417,605 acres,	1874, 629	24,337	23	160	27	16,811	8,330
		1875, 543	24,633	18	170	29	17,076	3,306
7	Londonderry, . 513,388 acres,	1874, 3,070	78,808	1,418	827	058	35,608	15,688
		1875, 2,059	77,582	1,656	679	772	33,780	14,463
8	Monaghan, . 318,806 acres,	1874, 1,648	62,007	1,955	120	88	23,856	8,571
		1875, 1,214	63,889	2,262	118	102	23,981	8,846
9	Tyrone, . . 778,944 acres,	1874, 2,804	117,354	52	154	142	44,832	16,916
		1875, 2,683	116,092	44	152	160	44,823	16,663
	Total of Ulster, 5,321,582 acres,	1874, 50,065	694,079	8,138	2,292	6,798	325,564	103,945
		1875, 46,590	704,897	9,436	2,118	7,474	328,533	102,236
	Increase or *Decrease* in Ulster in 1875, .	Decrease, 3,475	Increase, 10,818	Increase, 1,298	Decrease, 174	Increase, 676	Increase, 2,969	Decrease, 1,709
	Total of Ireland, 20,327,196 acres,	1874, 187,978	1,480,897	211,608	9,901	11,391	892,425	833,588
		1875, 161,321	1,499,371	233,747	10,312	11,647	900,277	832,783
	Increase or *Decrease* in Ireland in 1875, .	Decrease, 26,057	Increase, 18,474	Increase, 22,139	Increase, 411	Increase, 256	Increase, 7,852	Decrease, 805

for each County and Province, in the Years 1874 and 1875—*continued.*

Crops, in Statute Acres.										
Mangel Wurzel and Beet Root.	Cabbage.	Carrots, Parsnips, and other Green Crops.	Vetches and Rape.	Flax.	Meadow and Clover.	Total Extent under Crops.	Fallow or Uncropped Arable Land.	Years.	Population in 1871.	Number.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		Ulster:	
458	219	1,431	1,067	9,192	82,185	242,045	1,306	1874	404,015	1
668	159	1,359	1,428	9,442	83,405	248,200	754	1875		
294	181	1,705	983	7,906	42,137	163,251	180	1874	179,260	2
453	172	1,007	1,296	7,080	44,521	168,892	93	1875		
477	1,335	1,039	218	5,741	81,603	154,237	113	1874	140,735	3
566	1,253	1,016	177	5,298	61,946	156,312	53	1875		
450	1,428	1,003	1,051	11,408	50,398	231,842	708	1874	218,334	4
567	1,569	1,199	854	11,601	55,371	237,746	285	1875		
1,026	415	2,256	2,022	22,387	70,545	320,185	326	1874	293,449	5
1,228	306	2,535	2,713	17,969	72,887	322,979	1,684	1875		
741	496	596	103	2,526	54,586	104,345	324	1874	92,794	6
895	445	651	81	2,823	56,344	107,019	169	1875		
847	576	1,047	953	17,381	39,670	196,357	393	1874	173,908	7
591	926	2,256	777	16,402	36,673	188,618	265	1875		
464	588	1,050	248	8,692	82,361	141,808	50	1874	114,989	8
583	337	1,005	247	7,925	32,699	143,208	123	1875		
426	553	1,653	429	17,576	55,908	258,799	220	1874	215,766	9
582	778	2,240	446	19,993	55,582	260,238	398	1875		
4,981	5,791	11,840	7,174	102,809	489,373	1,812,849	3,620	1874	Total of Ulster, 1,833,228	
6,133	5,945	13,868	8,019	98,533	499,428	1,833,210	3,824	1875		
Increase, 1,152	Increase, 154	Increase, 2,028	Increase, 845	Decrease, 4,276	Increase, 10,055	Increase, 20,361	Increase, 204	*Increase* or *Decrease* in Ulster in 1875.		
38,327	33,184	34,694	21,425	108,907	1,908,679	5,269,004	12,102	1874	Total of Ireland, 5,412,377	
43,274	34,874	37,184	21,694	101,248	1,943,923	5,381,655	11,287	1875		
Increase, 4,947	Increase, 1,690	Increase, 2,490	Increase, 269	Decrease, 5,659	Increase, 37,244	Increase, 62,651	Decrease, 815	*Increase* or *Decrease* in Ireland in 1875.		

TABLE showing the Number of LIVE STOCK in each

Number.	Provinces and Counties.		Horses, with the purposes for which it was stated they are kept, or intended by the Owners.						Number of Mules.	Number of Asses.	Cattle		
			Two years old and upwards.			One year old and under two years.	Under one year.	Total Number of Horses.			Milch Cows.	Other	
			Agricultural.	Traffic and Manufactures.	Amusement or Recreation.							Two years old and upwards.	One year old and under two years.
	Leinster:												
1	Carlow,	1874,	5,012	202	423	795	803	7,235	412	2,737	13,912	11,198	12,38
		1875,	4,960	148	483	896	838	7,325	414	2,615	13,313	12,580	11,81
2	Dublin,	1874,	5,729	0,400	3,339	896	057	20,030	306	2,174	14,947	24,251	9,81
		1875,	5,649	0,134	3,508	922	660	19,873	320	2,090	14,722	23,409	9,48
3	Kildare,	1874,	7,314	914	1,556	1,808	1,258	12,850	380	4,315	13,711	43,316	18,91
		1875,	7,538	1,084	1,679	1,858	1,213	13,372	421	4,292	13,528	46,852	17,68
4	Kilkenny,	1874,	11,251	481	742	1,728	1,801	16,003	871	5,219	40,919	21,298	30,67
		1875,	11,095	564	730	1,034	2,046	16,369	901	5,334	41,741	24,831	28,21
5	King's,	1874,	8,359	396	631	1,843	1,596	12,825	828	6,078	15,979	27,563	18,10
		1875,	8,352	343	033	1,917	1,670	12,924	865	6,181	16,247	30,988	16,40
6	Longford,	1874,	3,852	171	236	978	865	6,102	615	2,946	18,340	12,788	12,53
		1875,	3,827	70	240	1,045	988	6,170	619	2,908	18,960	12,396	12,10
7	Louth,	1874,	7,252	632	627	1,045	1,191	10,747	220	1,743	9,420	13,542	10,40
		1875,	7,126	743	602	1,197	1,271	10,930	228	1,764	9,747	13,813	9,59
8	Meath,	1874,	8,475	587	1,734	2,386	1,607	14,789	640	2,967	16,478	104700	31,37
		1875,	8,550	372	1,884	2,516	1,802	15,124	678	3,072	16,111	10008	30,22
9	Queen's,	1874,	8,039	370	770	1,530	1,460	12,760	704	6,104	21,372	24,623	19,34
		1875,	8,588	311	806	1,520	1,317	12,542	754	5,945	21,841	26,002	17,23
10	Westmeath,	1874,	6,836	202	853	1,773	1,494	11,158	678	4,100	16,031	42,673	23,93
		1875,	6,754	172	889	1,867	1,563	11,245	638	4,042	15,943	45,062	21,78
11	Wexford,	1874,	18,343	576	1,083	2,596	2,720	25,318	1,236	8,059	40,081	20,782	29,31
		1875,	18,398	468	1,000	2,903	2,840	25,699	1,156	8,002	40,687	25,566	28,31
12	Wicklow,	1874,	7,593	409	761	1,317	1,158	11,238	323	3,455	26,868	19,188	18,07
		1875,	7,188	408	750	1,633	1,239	11,218	300	3,498	26,549	22,033	18,15
	Total of Leinster,	1874,	98,655	14,349	12,755	18,695	16,610	161,064	7,222	49,906	248,958	365,920	234,93
		1875,	98,025	13,817	13,204	20,298	17,456	162,800	7,294	49,743	249,889	393,540	221,01
	Increase or *Decrease* in Leinster in 1875,		Decrease 630	Decrease 532	Increase 449	Increase 1,603	Increase 846	Increase 1,736	Increase 72	Decrease 163	Increase 931	Increase 27,620	Decrease 13,91

County and Province in the Years 1874 and 1875.

Cattle.		Sheep.				Pigs.						
		One year old and upwards.										
Under one year.	Total Number of Cattle.	Ewes.	Tups and Wethers.	Under one year.	Total Number of Sheep.	One year old and upwards.	Under one year.	Total Number of Pigs.	Number of Goats.	Number of Poultry.	Years.	Number.
11,434	48,926	29,879	17,597	27,917	75,393	2,541	20,148	22,689	2,932	160,371	1874	1
10,461	48,672	30,004	19,302	27,919	77,225	2,921	20,763	23,684	3,364	164,492	1875	
6,711	55,722	34,713	20,206	20,329	81,248	2,771	16,739	19,510	6,258	203,615	1874	2
6,149	53,764	29,701	15,236	22,067	07,004	2,106	13,303	15,409	6,183	197,977	1875	
10,630	86,567	67,421	44,685	58,314	170,420	1,316	13,424	14,740	3,138	212,091	1874	3
10,344	88,404	61,868	40,522	51,408	153,798	1,797	12,119	13,916	3,208	227,746	1875	
29,524	122,410	51,491	29,382	48,111	128,984	5,474	39,952	45,426	0,315	394,013	1874	4
25,285	120,073	47,421	28,473	44,765	120,659	5,736	43,115	48,851	6,828	379,918	1875	
10,086	71,734	52,706	43,110	54,284	150,100	2,251	18,718	20,969	3,795	261,725	1874	5
9,205	72,846	52,228	38,895	49,816	140,939	2,673	20,066	22,739	3,363	249,763	1875	
12,980	56,640	14,434	7,356	14,675	36,465	1,778	13,572	15,350	7,091	192,838	1874	6
13,675	57,134	14,527	6,917	14,246	35,690	2,178	17,047	20,125	8,436	154,785	1875	
6,361	39,724	27,003	5,239	24,414	56,656	1,472	12,426	13,898	4,917	210,108	1874	7
6,370	39,528	24,660	5,014	20,368	50,042	1,470	14,856	16,326	5,461	223,844	1875	
13,934	166,486	95,194	63,019	84,417	242,630	1,862	12,080	14,542	6,195	269,090	1874	8
13,921	170,261	86,481	55,968	78,714	221,163	1,972	14,158	16,130	6,591	285,387	1875	
13,056	78,391	41,219	28,631	38,508	108,358	3,283	24,153	27,436	5,491	254,253	1874	9
12,166	77,241	40,559	23,390	36,553	100,502	3,221	25,877	29,098	5,288	256,444	1875	
15,115	97,757	55,506	54,038	64,309	173,943	1,274	16,081	17,355	7,236	254,527	1874	10
14,014	96,802	52,084	50,222	58,728	161,034	1,289	17,805	19,154	6,678	256,257	1875	
29,816	120,897	66,734	37,023	60,016	163,773	8,895	54,722	63,617	5,536	497,536	1874	11
27,534	122,103	69,820	35,760	60,423	166,003	8,095	56,179	65,174	5,616	476,351	1875	
17,391	81,520	87,040	58,454	71,5[illegible]6	217,056	3,160	18,193	21,358	6,684	188,520	1874	12
15,555	82,290	84,054	64,943	67,[illegible]07	217,104	3,350	18,787	22,137	6,895	184,327	1875	
177,038	1,026,774	623,436	408,740	572,850	1,605,026	36,077	260,813	296,890	66,188	3,096,687	1874	
164,679	1,029,118	594,307	384,642	532,214	1,511,163	37,700	275,035	312,743	68,416	3,057,291	1875	
De-crease 12,359	In-crease 2,344	De-crease 29,129	De-crease 24,098	De-crease 40,636	De-crease 93,863	In-crease 1,631	In-crease 14,222	In-crease 15,853	In-crease 2,228	De-crease 41,396	—	

[continued on page 18.

TABLE showing the Number of LIVE STOCK in each

Number.	Provinces and Counties.		Horses, with the purposes for which it was stated they are kept, or intended by the Owners.					Number of Mules.	Number of Asses.	Cattle.		
			Two years old and upwards.			One year old and under two years.	Under one year.	Total Number of Horses.			Milch Cows.	Other	
			Agricultural.	Traffic and Manufactures.	Amusement or Recreation							Two years old and upwards.	One year old and under two years.
	Munster:												
1	Clare,	1874,	10,634	372	627	1,944	1,723	15,300	419	9,084	56,299	39,150	41,927
		1875,	10,302	405	591	1,977	1,633	14,908	363	8,893	57,623	36,722	37,512
2	Cork, E.R.,	1874,	21,266	1,976	2,271	3,853	3,877	33,243	1,157	5,914	98,314	24,294	40,382
		1875,	21,042	1,537	2,078	4,367	4,080	33,084	1,246	6,243	101,023	26,306	36,415
3	Cork, W.R.	1874,	14,118	264	575	1,559	2,213	18,729	223	2,515	82,953	15,520	28,145
		1875,	13,762	302	502	1,892	2,250	18,517	197	2,378	86,218	16,793	26,283
4	Kerry,	1874,	11,244	445	555	1,401	1,516	15,161	1,656	7,541	109,070	28,713	33,162
		1875,	10,665	408	564	1,348	1,690	14,675	1,841	7,922	112,140	30,261	32,241
5	Limerick,	1874,	10,517	002	1,098	1,499	1,313	15,329	1,204	7,719	97,692	22,305	25,987
		1875,	10,072	786	1,075	1,576	1,300	14,809	1,257	7,653	99,418	24,385	26,053
6	Tipperary, N.R.,	1874,	8,599	365	677	1,722	1,561	12,924	751	6,101	31,864	27,906	27,468
		1875,	8,605	290	741	1,809	1,690	13,135	821	6,336	32,647	29,557	24,321
7	Tipperary, S.R.,	1874,	8,752	433	1,093	1,446	1,336	13,060	884	6,675	51,962	21,875	24,573
		1875,	8,411	551	988	1,644	1,342	12,936	861	6,665	52,381	24,969	23,867
8	Waterford,	1874,	8,399	608	833	1,446	1,351	12,637	657	3,865	43,702	11,870	20,419
		1875,	8,217	539	753	1,747	1,515	12,771	047	3,926	44,600	14,811	18,009
	Total of Munster,	1874,	93,529	5,365	7,729	14,870	14,690	136,383	6,951	49,414	571,365	191,633	242,063
		1875,	91,076	4,818	7,292	16,160	15,489	134,835	7,233	50,016	586,149	203,804	224,701
	Increase or *Decrease* in Munster in 1875,		Decrease 2,453	Decrease 547	Decrease 437	Increase 1,290	Increase 599	Decrease 1,548	Increase 282	Increase 602	Increase 14,284	Increase 12,171	Decrease 17,362
	Connaught:												
1	Galway,	1874,	16,268	802	1,255	3,316	3,850	25,491	1,243	14,216	42,448	66,864	35,222
		1875,	15,680	897	1,189	3,320	4,153	25,239	1,337	14,093	43,391	70,721	34,180
2	Leitrim,	1874,	2,122	372	197	413	353	3,457	238	7,306	39,368	15,001	17,230
		1875,	2,078	233	178	391	388	3,268	270	7,311	41,134	14,225	14,845
3	Mayo,	1874,	12,186	540	608	1,529	2,340	17,203	1,505	20,087	58,734	53,044	30,324
		1875,	11,887	464	511	1,696	2,816	17,374	1,780	19,546	59,963	53,049	31,850
4	Roscommon,	1874,	4,691	334	688	1,300	1,066	8,079	1,033	7,616	29,060	27,944	22,773
		1875,	4,414	326	747	1,321	1,244	8,052	1,045	7,747	31,782	30,650	22,513
5	Sligo,	1874,	4,940	294	355	815	691	7,095	580	7,639	34,508	20,030	19,030
		1875,	4,796	378	334	759	886	7,153	465	7,492	36,014	20,972	18,518
	Total of Connaught,	1874,	40,207	2,342	3,103	7,373	8,300	61,325	4,599	56,064	203,018	103,483	124,585
		1875,	30,855	2,298	2,959	7,487	9,407	61,086	4,897	56,189	212,284	189,617	121,856
	Increase or *Decrease* in Connaught in 1875,		Decrease 1,352	Decrease 44	Decrease 144	Increase 114	Increase 1,187	Decrease 239	Increase 298	Decrease 675	Increase 9,200	Increase 6,134	Decrease 2,729

County and Province in the Years 1874 and 1875—*continued.*

Cattle.		Sheep.				Pigs.						
		One year old and upwards.										
Under one year.	Total Number of Cattle.	Ewes.	Tups and Wethers.	Under one year.	Total Number of Sheep.	One year old and upwards.	Under one year.	Total Number of Pigs.	Number of Goats.	Number of Poultry.	Years.	Number.
37,231	174,607	67,916	38,408	61,064	167,388	6,314	30,493	36,807	14,260	397,369	1874	1
33,334	165,191	60,493	34,328	54,100	148,927	6,963	34,068	41,031	14,314	393,837	1875	
56,436	219,426	105,224	28,142	90,372	223,738	14,589	71,830	86,419	13,739	579,052	1874	2
46,288	210,032	101,187	25,826	85,541	212,554	16,306	75,979	92,285	13,920	571,224	1875	
35,833	162,451	65,402	11,846	51,810	129,058	9,216	40,704	49,920	10,941	401,983	1874	3
31,321	160,615	65,188	12,534	50,310	128,032	10,546	44,859	55,405	10,977	404,248	1875	
44,193	215,147	53,672	16,750	35,542	105,964	8,000	41,539	49,539	24,926	385,774	1874	4
43,059	217,701	53,557	17,235	35,227	106,019	8,132	43,731	51,863	25,319	385,943	1875	
59,128	205,112	32,272	10,999	25,571	77,842	7,295	43,533	50,828	10,297	375,736	1874	5
49,882	199,738	28,886	17,089	24,260	70,244	8,653	40,328	57,981	10,068	365,895	1875	
21,254	108,492	62,109	36,696	62,772	161,037	4,460	28,612	33,072	5,896	281,320	1874	6
18,700	105,225	57,363	33,501	57,567	148,431	4,767	33,939	38,706	6,164	289,800	1875	
36,002	134,412	58,017	33,653	53,255	144,025	5,259	36,153	41,412	5,373	339,992	1874	7
29,084	130,301	55,567	27,554	50,076	133,197	0,144	40,394	46,538	6,526	334,739	1875	
23,014	99,005	28,617	9,760	26,256	64,633	6,446	39,253	45,699	4,944	230,577	1874	8
18,137	95,656	28,227	8,250	24,234	60,720	7,497	41,718	49,215	4,262	226,307	1875	
313,091	1,318,652	473,289	195,254	406,642	1,075,185	61,579	332,117	393,696	90,376	2,991,803	1874	
269,805	1,284,459	450,468	176,326	381,330	1,008,124	69,098	364,016	433,024	92,150	2,971,993	1875	
De-crease, 43,286	De-crease 34,193	De-crease, 22,821	De-crease, 18,928	De-crease, 25,312	De-crease, 67,061	In-crease, 7,429	In-crease, 31,899	In-crease, 39,328	In-crease 1,774	De-crease 19,810	—	
22,317	166,851	258,585	217,078	206,844	682,507	6,698	42,222	48,920	9,668	622,906	1874	1
22,780	171,022	247,424	217,134	193,799	658,357	7,370	50,201	57,571	11,360	619,406	1875	
21,082	93,261	8,157	2,093	7,320	18,176	2,605	15,410	18,015	5,534	245,699	1874	2
23,085	93,269	7,536	2,637	6,375	16,548	3,082	18,900	21,982	5,346	249,837	1875	
26,208	166,310	125,048	72,148	103,703	300,899	5,325	35,800	41,125	5,230	603,159	1874	3
29,752	174,614	124,202	72,451	103,585	300,238	6,991	46,670	53,661	4,855	584,864	1875	
18,791	99,468	72,349	68,505	65,021	205,965	3,380	22,196	25,576	10,613	404,400	1874	4
21,271	106,216	71,827	65,547	65,948	203,322	3,631	27,778	31,409	11,658	403,708	1875	
20,057	93,631	27,361	13,384	23,991	64,730	1,678	13,590	15,268	2,785	287,574	1874	5
22,029	97,533	27,877	12,847	24,573	65,297	2,540	17,048	19,588	3,063	269,163	1875	
103,435	619,521	491,500	373,898	406,885	1,272,283	19,686	129,218	148,904	33,830	2,163,738	1874	
118,897	642,654	478,866	370,616	394,280	1,243,762	23,614	160,597	184,211	36,282	2,126,978	1875	
In-crease, 10,462	In-crease 23,133	De-crease, 12,634	De-crease, 3,282	De-crease, 12,605	De-crease, 28,521	In-crease, 3,928	In-crease, 31,379	In-crease, 35,307	In-crease 2,452	De-crease 36,760	—	

[*continued on page* 20.

TABLE showing the Number of LIVE STOCK in each

Number.	Provinces and Counties.		Horses, with the purposes for which it was stated they are kept, or intended by the Owners.					Number of Mules.	Number of Asses.	Cattle.		
			Two years old and upwards.			One year old and under two years.	Under one year.	Total Number of Horses.			Milch Cows.	Other: Two years old and upwards.	Other: One year old and under two years.
			Agricultural.	Traffic and Manufactures.	Amusement or Recreation.								
	Ulster:												
1	Antrim,	1874,	21,190	3,022	1,144	1,684	1,862	28,902	66	645	63,931	24,809	34,726
		1875,	20,626	2,552	1,148	2,103	2,125	28,554	67	675	65,229	23,993	31,912
2	Armagh,	1874,	9,973	020	433	512	643	12,181	104	1,543	32,315	12,196	20,441
		1875,	9,975	587	410	577	811	12,360	213	1,680	33,602	10,876	18,363
3	Cavan,	1874,	7,016	329	377	922	1,059	9,703	986	9,066	48,862	16,990	23,769
		1875,	6,810	356	361	030	1,213	9,670	1,024	8,745	50,295	10,847	21,829
4	Donegal,	1874,	19,722	385	320	1,029	1,549	23,005	39	1,985	69,644	36,009	36,642
		1875,	18,765	521	315	1,104	1,799	22,504	42	1,923	71,852	36,368	35,658
5	Down,	1874,	25,119	1,407	1,007	1,939	2,108	31,580	148	1,245	55,766	18,365	35,189
		1875,	24,884	1,139	1,045	2,021	2,607	31,696	126	1,169	56,208	16,958	32,008
6	Fermanagh,	1874,	5,244	185	293	430	499	6,660	131	4,196	43,548	15,813	14,965
		1875,	5,248	193	308	512	581	6,842	147	4,220	44,628	14,954	14,154
7	L.derry,	1874,	17,517	446	551	1,296	1,891	21,701	79	571	45,558	16,491	24,007
		1875,	17,111	675	485	1,145	1,843	21,259	16	415	45,715	15,535	22,692
8	Monaghan,	1874,	8,330	224	299	556	757	10,166	386	4,030	33,214	11,082	20,044
		1875,	8,194	285	293	647	827	10,246	377	3,961	34,740	11,091	17,785
9	Tyrone,	1874,	20,378	546	453	1,031	1,509	23,917	74	1,015	74,696	21,052	34,918
		1875,	20,153	616	487	1,190	1,862	24,308	80	1,006	78,171	20,093	32,150
	Total of Ulster,	1874,	134,139	7,164	4,977	9,103	11,877	167,315	2,013	24,246	467,534	172,807	244,701
		1875,	131,766	6,924	4,052	10,529	13,663	167,139	2,092	23,794	480,530	166,715	226,551
	Increase or *Decrease* in Ulster in 1875,		Decrease 2,723	Decrease 240	Decrease 25	Increase 821	Increase 1,791	Decrease 376	Increase 79	Decrease 452	Increase 12,996	Decrease 0,092	Decrease 18,150
	Total of Ireland,	1874,	366,630	29,220	28,464	50,316	51,677	526,307	20,785	180,430	1,491,375	913,843	846,207
		1875,	359,722	27,857	28,307	54,174	56,100	526,160	21,516	179,742	1,528 852	953,676	794,118
	Increase or *Decrease* in Ireland in 1875,		Decrease 7,158	Decrease 1,363	Decrease 157	Increase 3,828	Increase 4,423	Decrease 427	Increase 731	Decrease 688	Increase 37,477	Increase 39,833	Decrease 52,089

County and Province in the Years 1874 and 1875—*continued.*

Cattle.		Sheep.				Pigs.						
		One year old and upwards.										
Under one year.	Total Number of Cattle.	Ewes.	Tups and Wethers.	Under one year.	Total Number of Sheep.	One year old and upwards.	Under one year.	Total Number of Pigs.	Number of Goats.	Number of Poultry.	Years.	Number.
36,586	160,052	38,350	10,002	32,514	80,866	5,474	43,052	48,526	4,774	383,351	1874	1
33,928	155,062	37,366	8,418	32,400	78,184	5,959	50,507	56,460	5,694	378,013	1875	
18,907	83,859	7,234	1,134	6,988	15,356	3,037	16,007	19,044	8,144	308,172	1874	2
19,683	82,614	6,626	1,123	7,225	14,974	3,349	21,715	25,064	8,540	321,062	1875	
30,728	120,349	12,124	3,502	12,598	28,224	6,174	28,201	34,375	14,695	423,502	1874	3
31,428	120,399	12,262	2,593	12,467	27,322	7,986	34,277	42,263	15,800	422,501	1875	
34,886	177,181	84,810	29,877	58,161	172,854	3,299	17,432	20,731	2,215	523,873	1874	4
38,708	182,580	81,697	35,839	56,173	173,709	3,979	22,311	26,290	2,128	580,515	1875	
36,374	145,694	28,299	7,728	26,702	62,729	5,278	36,058	41,336	11,688	550,595	1874	5
35,568	140,742	31,480	9,365	28,282	69,127	6,017	41,468	47,485	12,845	547,357	1875	
25,556	99,882	5,990	1,691	6,034	13,718	2,103	15,201	17,304	3,818	313,228	1874	6
20,669	100,405	5,706	1,991	5,762	13,459	2,722	18,691	21,413	4,818	323,635	1875	
27,416	113,472	18,607	4,512	18,788	41,907	3,901	24,169	28,070	4,159	321,468	1874	7
28,778	112,720	10,929	3,744	16,811	37,484	3,732	29,801	33,533	4,210	316,997	1875	
21,337	85,677	8,372	1,208	9,293	18,873	2,596	18,904	21,500	9,907	371,977	1874	8
21,418	85,034	8,031	1,406	8,918	18,355	3,734	24,568	28,302	10,440	401,846	1875	
42,977	173,643	25,839	0,559	22,279	54,677	3,874	24,930	28,810	6,959	611,081	1874	9
45,783	170,197	23,583	6,906	22,000	52,495	4,861	33,580	38,441	7,571	607,580	1875	
274,767	1,159,609	220,631	66,216	193,357	480,204	35,736	223,960	259,696	66,359	3,814,147	1874	
281,963	1,155,739	223,630	71,385	190,044	485,109	42,339	276,913	319,257	72,046	3,899,506	1875	
Increase 7,196	Decrease 4,050	Decrease 5,951	Increase 5,169	Decrease 3,313	Decrease 4,095	Increase 6,603	Increase 52,953	Increase 59,561	Increase 5,687	Increase 85,359	—	
873,331	4,124,756	1,817,656	1,844,106	1,579,734	4,441,696	153,076	946,106	1099186	256,753	12,068,375	1874	
835,344	4,111,990	1,747,321	1,002,969	1,497,868	4,248,158	172,669	1076566	1249235	268,894	12,055,768	1875	
Decrease 37,987	Decrease 12,766	Decrease 70,535	Decrease 41,139	Decrease 81,866	Decrease 193,540	Increase 19,591	Increase 130458	Increase 150049	Increase 12,141	Decrease 12,607	—	

Number of Irish Emigrants from each Province during the first SIX Months of 1874 and 1875, and the Increase or Decrease in the latter Year, compiled from Returns obtained by the Constabulary, who acted as Enumerators at the several Irish Ports.

Months.	PROVINCES.											
	LEINSTER.				MUNSTER.				ULSTER.			
	1874.	1875.	Increase.	Decrease.	1874.	1875.	Increase.	Decrease.	1874.	1875.	Increase.	Decrease.
	Persons.				Persons.				Persons.			
January,	217	244	27	.	380	558	178	.	1,981	907	.	1,074
February,	294	424	130	.	1,123	950	.	173	1,629	1,093	.	536
March,	755	695	.	60	1,532	1,374	.	158	2,435	1,561	.	874
April,	1,579	1,528	.	51	3,888	3,745	.	143	3,441	2,438	.	1,003
May,	2,900	1,389	.	1,511	5,440	2,911	.	2,529	4,556	2,987	.	1,569
June,	1,369	748	.	621	2,518	1,822	.	696	2,894	1,938	.	956
Total,	7,114	5,028	.	2,086	14,831	11,360	.	3,521	16,936	10,924	.	6,012

Months.	CONNAUGHT.				FROM WHAT PROVINCE NOT STATED.				IRELAND.			
	1874.	1875.	Increase.	Decrease.	1874.	1875.	Increase.	Decrease.	1874.	1875.	Increase.	Decrease.
January,	151	97	.	54	3	.	.	3	2,732	1,806	.	926
February,	224	163	.	61	.	1	1	.	3,270	2,631	.	639
March,	740	473	.	267	.	.	.	.	5,462	4,103	.	1,359
April,	2,048	1,469	.	579	9	.	.	9	10,965	9,180	.	1,785
May,	2,687	1,054	.	1,633	1	23	22	.	15,584	8,364	.	7,220
June,	985	503	.	482	2	.	.	2	7,768	5,011	.	2,757
Total,	6,835	3,759	.	3,076	15	24	9	.	45,781	31,095	.	14,686

The entire number of emigrants (*Irish*) from Ireland, since May, 1851—*the period when the Enumeration commenced*—to the 30th June last, was 2,357,024, of whom 1,258,486 were males, and 1,098,538 were females.

APPENDIX.

EXTIRPATION OF WEEDS.

THE following extracts from the General Abstracts of Tillage and Live Stock for the years 1856 and 1857, submitted by me to the Lord Lieutenant [the late Earl of Carlisle, K.G.], which contain much useful information from the writings of the celebrated Sir John Sinclair and other distinguished individuals, are reprinted in the hope that they may be of service to all those engaged in the cultivation of land, by directing more earnest attention to the subject, and *inducing a general determination to extirpate weeds from not only all tillage and grass lands, but also from the highways, sides of railways, canals, and waste lands of Ireland*:—

MEASURES TAKEN TO EFFECT THE DESTRUCTION OF WEEDS.

Your Excellency is aware that in connexion with the Agricultural Statistics, I have, for the last four years, had returns made to me by the Constabulary, showing the extent to which weeds are permitted to grow, and, in most cases, *to shed their seeds*, on the sides of highways, railways, and canals, as well as on the various farms of the country. I beg to take this opportunity of acquainting your Excellency how deeply sensible I am of the kind and considerate manner in which my request to the Judges to bring the subject before the various Grand Juries was received and acted upon by their Lordships, not only on the last Spring circuit, but more particularly during that lately concluded; and I am informed, by communications from almost every county, that the several Grand Juries have given directions to the County Surveyors to take all necessary steps to prevent the great injury to the farming classes which has hitherto arisen from the growth of weeds along the sides of public roads. I would here take the liberty of remarking that your Excellency's observations at the meeting of the Royal Dublin Society last April, and also at the late cattle show of the Royal Agricultural Society, at Athlone, as to the lamentable prevalence of weeds in Ireland, have had the happiest effect. In answer to

the circular which I took the liberty of addressing to the Directors of railways and canals, I have to acknowledge the receipt, in several instances, of very courteous replies; copies of these I have felt it to be my duty to forward for insertion in the public papers, feeling that the assistance of the Press, which has hitherto been most liberally afforded to me on all occasions, is of the greatest importance, by making generally known the vast injury and loss which arise from the unchecked growth of weeds on the farms and along the highways of the country. Every observer, and even the general traveller, must be struck with the neglect on this important matter, which, with few exceptions, exists in almost every part of Ireland.

I beg to mention that, having brought this subject before the Commissioners of National Education, and suggested to them the many advantages that must arise by instructing their teachers to direct the attention of the children in the numerous schools under their control to the importance of destroying weeds when found growing on their parents' farms, I have received a reply promising every assistance in the matter, and have furnished to Mr. Macdonnell, the Resident Commissioner, 1,000 copies of my circular to County Surveyors, to be distributed by the teachers then in training, on their return home; and I have learned that 6,000 of these circulars have since been procured by the Commissioners, for circulation amongst their schools. The Committee of the Church Education Society have also promised their valuable assistance with the pupils in their schools, and also the Poor Law Commissioners, through the medium of the masters and teachers in workhouses, by instructing the children in attendance as to the advantages which must arise to the community by the practice of destroying weeds. The Governors of Erasmus Smith's Schools have also promised their friendly aid.

The Masters in Chancery, upon all of whom I waited personally, have unanimously taken the subject into their consideration, and, I am informed, purpose recommending that an order should be issued requiring receivers over the estates under the Court to use their influence with the tenantry to keep their farms free from weeds.

The Commissioners of Public Works have also directed the removal of weeds from all works in progress under their control—such as those of arterial drainage, roads, &c.

The following extract from the works of that eminent man and real patriot, Sir John Sinclair, first President of 'The Board of Agriculture,' quoted in the 'Rural Cyclopædia,' will be read with interest, as exhibiting the immense loss arising from the neglect of removing weeds from growing crops, and is highly valuable, as being the record of actual experiment:—

Sir John Sinclair on the destruction of Weeds.

"All plants which grow naturally among a crop that has been sown, "may be regarded as *enemies* to that crop. The destruction of such "plants, therefore, must be considered as one of the most important "branches of the agricultural art; for if that is neglected, or even but

Sir John Sinclair on the destruction of Weeds.

"slovenly performed, the crops may be reduced to the amount of one-fourth or one-third of a fair average crop, even upon the very best soils. Besides, it merits consideration, that if weeds are suffered to exist, the full advantages of manuring land, and many other improvements, can only be partially obtained. Nor is this all: the mixture of weeds in the soil prevents the crops from receiving the beneficial influence of the atmosphere,—sucks up that moisture so essential for the growth of the crop sown,—tends more than any other circumstance to injure the crop when lodged by violent winds or heavy rains,—augments the risks at harvest (for a crop that is clean may be ready for the stack-yard in much less time than is required to harvest it when incumbered with weeds),—and the seeds of these intruders deteriorate the quality of the grain. Notwithstanding all the injuries thence sustained, how many are there who hardly ever attempt to remove weeds in an effectual manner! This negligence is the more to be blamed, because, were farmers at the trouble of collecting all sorts of weeds before they had formed their seeds, and of mixing them with rich earth, with lime, or fermenting them with dung, they would soon be reduced into a soft pulpy mass, and in this way a pernicious nuisance might be converted into a valuable manure. Various *experiments* have been tried, to ascertain the positive advantage derived from carefully weeding one part of a field, and leaving another part undone; among these, the following, made with peculiar accuracy, may be safely relied on:—

"1. *Seven acres of light gravelly land were fallowed, and sown broadcast with wheat; one acre was measured off, and not a weed was pulled out of it; the other six were carefully weeded. The unweeded acre produced* 18 *bushels; the six weeded acres* 135 *bushels, or* 22½ *per acre, which is* 4½ *bushels, or* ¼ *more produce in favour of weeding.*—2. *A six-acre field was sown with barley, in fine tilth, and well manured. The weeding, owing to a great abundance of charlock, cost* 12*s. per acre. The produce of an unweeded acre was only* 13 *bushels; of the weeded,* 28. *Difference in favour of weeding,* 15 *bushels per acre, besides the land being so much cleaner for succeeding crops.*—3. *Six acres sown with oats, one acre ploughed but once, and unmanured, produced only* 17 *bushels. Another six acres, ploughed three times, manured, and weeded, produced* 37 *bushels. This experiment proves, that oats require good management, and will pay for it as well as other crops. Ten bushels of the increased produce may be fairly attributed to the weeding, and the other ten to the manure.*

"The importance of weeding, both to the individual and to the public, is such, that it ought to be enforced by law. At any rate, a regulation of police, for fining those who harbour weeds, the seeds of which may be blown into their neighbours' ground, can have no injustice in principle. In England, the petty constable might be required, by precept from the high constable, to give in presentments to the Quarter Sessions, containing a list of all persons who suffered weeds to run to seeds in their hedges or lands, such presentments to be particularly specified to the Court. Those referring to the coltsfoot, to be given in at the Lady-day sessions; and those referring to thistles, rag-weed, &c., to be given in at the Midsummer sessions. An order of Court might then be made for the immediate removal of such nuisances; and if not complied with, the offender should be fined a sum not exceeding five pounds, one-half to the informer, and the other half to go for the relief of the

Sir John Sinclair on the destruction of Weeds.

"poor. If, in consequence of such a system being enforced, *from four to "five bushels of wheat, fifteen bushels of barley, and ten bushels of oats ad-"ditional* were raised in *all the fields* in the kingdom, *whose crops are "injured by weeds*, the benefit would be well worth the labour and "expense, and the farmers would soon find that however anxious they "may be to have their lands tithe-free, yet to have them weed-free is of "still greater importance. On the whole, keeping his land in a clean "state ought to be a principal object with every farmer; and if this be "not carefully attended to, he may rest assured of paying dearly for his "neglect. But the losses which he suffers do not remedy the injury which "the public sustains from his slovenly conduct.

"In several countries the legislature has interposed its authority for "the destruction of weeds. By a regulation in France, *a farmer may sue "his neighbour, who neglects to destroy the thistles upon his land at the pro-"per seasons*, or may employ people to do it at the other's expense. In "Denmark, there is a law to oblige the farmers to root up the corn mari-"gold, *Chrysanthemum segetum*. But the oldest regulation for that pur-"pose was probably in Scotland; a statute of Alexander II., about the "year 1220, having been directed against that weed, which was considered "to be peculiarly pernicious to corn fields. The statute is very short, and "ably expressed. *It denounces that man to be a traitor 'who poisons the "king's lands with weeds, and introduces into them a host of enemies.'*— "Bondsmen who had this plant in their corn, *were fined a sheep for each "stalk*. Under the authority of that law, Sir William Grierson, a Scottish "baron, was accustomed to hold *Goul* courts, for the express purpose of fining "the farmers in whose growing crops three heads or upwards of that weed "were found. Such a plan, if generally adopted, would soon extirpate "weeds; and as by a *clause introduced into many leases* (and which *ought to "be universal*), the landlord is empowered to *cut down these weeds*, at the "*expense of the tenant*, if the latter neglect to do it himself, it is much to "be regretted that so useful a regulation should not be generally enforced. "The policy of *some legislative provision* for this purpose has been fre-"quently suggested. A clause enforcing the extirpation of weeds in "hedges along the sides of roads, passed the House of Commons, but was "thrown out by the Lords. It is to be hoped that so useful a measure, "even on a more extensive scale, will soon be passed into a law. By "some it is recommended that the destruction of weeds on the sides of "roads should be done at the parish expense; others, by the road-surveyors, "and the expense to be stated in their accounts. * * *

"Though it is impracticable to extirpate annual weeds altogether, "either by summer fallow or turnip culture, yet the number of weeds "may be so much lessened, by these means, as to prevent them from "materially injuring corn crops. Two measures are necessary for that "purpose,—first, to bring the seeds within the limits of vegetation; and "secondly, *to destroy every weed that vegetates*, thus regularly lessening "the original stock. As the seeds of annual weeds are naturally furnished "with the means of preservation while stored in the ground, it is abso-"lutely necessary to bring them into life before their destruction can be "effected. This is accomplished by the operations of ploughing, harrow-"ing, and rolling, by which the ground is pulverized and reduced, whilst "the seeds are brought to the surface, or so near it as to allow their speedy "vegetation. All the seeds within two or three inches of the surface, "may be expected to vegetate according to circumstances, such as richness "of soil, fineness of mould, and the degree of moisture which may pre-"vail when the above processes are executed. When the first crops of

"weeds appear above the surface, a second ploughing should be given, by "which that crop will instantly be destroyed, and a foundation laid for "producing another crop. Harrowing and rolling should again be resorted "to; and in this way, several crops may be annihilated, in warm and "moist seasons, before the turnips are drilled, more especially if attention "has been paid to harrow and roll the land after every ploughing, so that "sufficient moisture may be preserved to insure vegetation. When under "turnips, both the hand and horse hoe should be constantly employed "whenever weeds appear; and upon no account should a single one "be allowed to run to seed. *By paying due attention to these measures, "many farms which formerly were a nest of seed-weeds, are now brought "into such order that the weeds are kept under subjection and easily man-"aged.* In this way the destruction of many annual weeds may be accom-"plished, before the turnip-seed is sown, and the seeds of almost every "annual weed locked up in the ground, may be brought to the surface, "and within the reach of vegetation. Besides, the several horse and hand "hoeings given to the turnip crop, serve to destroy every annual weed as "fast as it appears; and if the seed-furrow given the corn crop which "succeeds the turnips, is not taken deeper than the horse-hoeing furrow "(and a greater depth is unnecessary), few weeds will appear in the corn "crop which afterwards follows. As grass-seeds are always sown in the "improved districts, with the corn crop that succeeds turnips, no annual "weeds can appear in that season; but it very often happens in the suc-"ceeding year, from ploughing the clover-stubble a little deeper than the "seed-furrow given to the crop which succeeded turnips, that a fresh "growth of annual weeds make their appearance. To get the better of "these enemies some experienced farmers have hand-weeded the crops "which followed clover, at an expense not less than from ten to twenty "shillings per acre, and evidently much to their advantage; whilst others "have resorted to the drill husbandry to get quit of annual weeds. The "*great object* of both was, *to procure clean crops*, each being perfectly satis-"fied that *if their crops were full of weeds*, the productive powers of the "soil would not only be deteriorated, but that *the amount or value of those "crops would be also considerably lessened.*

Sir John Sinclair on the destruction of Weeds.

"Owing to the nature of the soil and climate, many perennial weeds "are much more abundant in Scotland, and also in Ireland, Wales, and "the north and north-west of England, than in other countries, where the "soil is drier, and the climate more temperate. * * *

"*With regard to docks and thistles, the method of getting rid of them "is perfectly obvious; all that is required being to fallow the ground well "in the first instance, and to exterminate the plants afterwards whenever "they appear. This may be accomplished by pulling them up by the root, "in every corn field, when the weather is moist, and cutting them over in "all the grass lands before they have perfected their seeds; though cutting "should only be resorted to when the weather is so dry as to prevent pulling "these weeds out of the ground. The same attention ought to be paid to the "destruction of nettles, ragweeds, mugwort, and the mountain daisy. Every "one of these weeds ought to be pulled up by the root, if that measure can "be accomplished; but where that is impracticable, they ought to be regularly "cut down by the scythe, in which way their increase will at least be pre-"vented. This operation should always be performed before their seeds "arrive at maturity, otherwise the ground may thence be stocked with fresh "seed, to an extent not much less than if the cutting process had been "neglected.*"

Fecundity of Weeds.

The injurious effects of weeds are scarcely to be wondered at, when their extraordinary and almost *incredible fecundity* is taken into consideration. The following table (with the exception of the Irish names, for which I am indebted to Dr. O'Donovan and Mr. Eugene Curry, M.R.I.A.,) is taken from Professor Buckman, as quoted in the *Gardener's Chronicle and Agricultural Gazette* on the 12th of July, 1856 :—

"*Seeding of Weeds.*—One of the most fertile sources of the continuation "of weeds is that of constantly *allowing them to seed on the land.* Now "the enormous increase which may result from seeding may be gathered "from the following table of observations made upon a few of our common "species :—

Botanical Name.	Irish Name.	Common Name.	No. of Flowers.	No. of Seeds each Flower may bear.	No. of Seeds on a single Plant.
Senecio vulgaris,	Grunnasg,	Groundsel,	130	× 50 =	6,500
Stellaria media,	Fliodh,	Chickweed,	50	„ 10 „	500
Agrostemma githago,	Cogal-arbhuir,	Corn cockle,	7	„ 370 „	2,590
Lychnis dioica,	Rós-fiadhain,	Campion,	25	„ 137 „	3,425
Papaver rhœas,	Cailcin dearg,	Red poppy,	100	„ 500 „	50,000
Sinapis arvensis,	Carran buidhe,	Charlock,	400	„ 10 „	4,000
„ nigra,	Sgeallar dubh,	Black mustard,	200	„ 6 „	1,200
Galium tricorne,	Coinnleach leaptha,	Corn bed-straw,	100	„ 2 „	200
„ aparine,	Luibh-an-ladhair,	Clivers [Cleavers],	550	„ 2 „	1,100
Sonchus arvensis,	Fothannan,	Corn sow-thistle,	100	„ 190 „	19,000
Carduus nutans,	Fothannan cumhra,	Musk thistle,	25	„ 150 „	3,750
Æthusa cynapium,	Fionnas,	Fool's parsley,	300	„ 2 „	600
Ervum tetraspermum,	Roilléith,	Tare,	60	„ 3 „	180
Daucus carota,	Carrán Fiadhain,	Wild carrot,	600	„ 2 „	1,200
Pastinaca sativa,	Meacanfiadhain,	Wild parsnip,	600	„ 2 „	1,200

"Now, it is not likely that each individual plant would always "perfect the quantities of seeds above tabulated; but the list gives a "pretty accurate notion of the numbers of seeds which might be perfected "under circumstances favourable to their development, and from it will "at once be gathered the important practical fact that, allowing for the "casualties to which seeds are constantly liable, yet enough would be "left, where seeding is allowed but for *a single year*, to give trouble for "*many years after.*

"*It cannot be too earnestly urged* THAT WEEDS BE DESTROYED BEFORE "THEIR SEEDS ARE RIPE, OR INDEED NEARLY RIPE, *as the ripening process* "*is often completed by the juices in the stems, especially of pulled weeds:* "*hence groundsel and thistles, when pulled and laid by, as we saw last* "*year, yet ripened much seed; and their involucres, opening in the sun,* "*were wafted on the breeze to an indefinite distance; and it should be* "*recollected that one—the primary head—may ripen long before the rest,* "*so that a tolerable weed-growth may follow from a delay which has* "*allowed only this one head to perfect its seed. Each plant of groundsel* "*might in this way be increased 50 fold, each plant of corn sow-thistle* "*190 fold, and a single head of musk-thistle may produce an increase* "*of 150 fold.*"

And in the number of the same useful periodical for November 18, 1854, another list of weeds is given, from which the following are selected :—

Botanical Name.	Irish Name.	Common Name.	Number of Seed vessels or Flowers to each Plant.		Number of Seeds to each Vessel or Flower.		Number of Seeds to each Plant.	When gathered in 1854.
Capsella bursa pastoris,	Sraidin,	Shepherd's purse,	150	×	30	=	4,500	Sept. 9
Sisymbrium officinale,	Lus-an-oir,	Common hedge mustard,	450	„	12	„	5,400	Oct. 13
Heracleum sphondylium,	Goran (or Goranach),	Cow parsnip,	2,500	„	2	„	5,000	Aug. 17
Convolvulus arvensis,	. . . .	Corn bind weed,	200	„	3	„	600	Sept. 26
Galeopsis ladanum,	Neanntog,	Heabit nettle,	500	„	4	„	2,000	„
Bartsia odontites,	. . . .	Red bartsia,	400	„	12	„	4,800	Oct. 1
Leontodon taraxacum,	Castsearbhan,	Dandelion,	12	„	170	„	2,040	„
Centaurea jacobea,	Gob-an-Ghiusain,	Hardhead scabious,	50	„	80	„	4,000	Sept. 10
„ nigra,	. . . .	Blackhead,	50	„	60	„	3,000	„
Anthemis cotula,	Brean-lus.	Stinking chamomile,	271	„	150	„	40,650	Sept. 23
Matricaria chamomilla,	Moidiur,	Mayweed,	150	„	300	„	45,000	Oct. 14
Chrysanthemum leucanthemum,	Faspug-ban,	Ox-eye daisy,	45	„	300	„	13,500	Sept. 18
Arctium lappa,	Copog tnathail,	Burdock,	613	„	40	„	24,520	Oct. 1
Sonchus oleraceus,	Bleacht Fheothadan,	Sow thistle,	100	„	250	„	25,000	Sept. 6
Carduus acaulis,	. . . .	Stemless thistle,	6	„	100	„	600	Sept. 8
Papaver dubium,	. . . .	. . . .	100	„	600	„	60,000	Oct. 14
Rumex obtusifolius,	Copog sraide,	Common dock,	13,000				13,000	Sept. 15
Euphorbia exigua,	. . . .	Dwarf spurge,	500	„	3	„	1,500	Sept. 19
„ peplus,	Geinneinin,	Petty spurge,	400	„	3	„	1,200	Sept. 11
„ helioscopia,	. . . .	Sun spurge,	324	„	3	„	972	Oct. 14
Lapsana communis,	Duilleog bhaighte,	Nipple wort,	560	„	15	„	8,400	Sept. 23

Annexed are the names of some of the most noxious weeds, with compound flowers, which I have been informed by Doctor Mackay, author of the 'Flora Hibernica,' grow wild in Ireland, and all of which produce seeds in the greatest quantity :—

COMMON NAMES.	BOTANICAL NAMES.
1. Spear plume thistle.	Cnicus lanceolatus.
2. Marsh plume thistle.	Cnicus palustris.
3. Creeping plume thistle.	Cnicus arvensis.
4. Welted thistle.	Carduus acanthoides.
5. Slender-flowered thistle.	Carduus tenuiflorus.
6. Dandelion.	Leontodon taraxacum.
7. Ox-eye daisy.	Chrysanthemum leucanthemum.
8. Corn marygold.	Chrysanthemum segetum.
9. Rough hawkbit.	Apargia hirta.
10. Autumnal hawkbit.	Apargia autumnalis.

Of so much importance has the eradication of weeds been considered in the Colony of Victoria, that an Act has been recently passed to insure their destruction; the owner or occupier of the land on which they grow may be ordered by a Justice of the Peace to destroy them, and is liable to a fine if he does not comply—a course which, if followed in this country, would be

gratefully received by the farming classes, and be productive of great national benefit, as, according to the experiments of Sir John Sinclair, already referred to, the land, WHEN KEPT FREE FROM WEEDS, WILL YIELD A MUCH GREATER AMOUNT OF PRODUCE.

It will be gratifying to your Excellency to learn that I have received from very many influential parties, to whom I am personally unknown, communications expressive of their entire approval of what has been termed by some of them the 'National Crusade against Weeds.' I also learn, from copies of almost every journal in Ireland, kindly sent to me by the editors, that the Press has, without exception, given its powerful aid to the same object—one which most happily has received your Excellency's marked approbation. And I confidently trust, from the opinions so unequivocally expressed in every quarter, that much and permanent good will be effected by bringing the present great neglect on this subject prominently under public observation.

In the observations on the Agricultural Abstracts for last year [1856] I had the honour of stating the measures taken by me to call public attention to the great injury and loss caused by the non-removal of weeds from farms and the sides of high roads, railways, and canals. I am now informed, that in some localities improvement has taken place; but on account of the unchecked growth of weeds in so many places, as well as in the fields and hedge-rows of the slovenly and careless farmer, the efforts of those desirous to effect their eradication are, in a great measure, frustrated. To the extensive circulation of the information given in the Abstracts for 1856, as authorized by your Excellency, and to the able appeals on the subject which have appeared in the public press, this improvement may be attributed; *until legislation, however, affords some remedy to those who keep their lands free from weeds against such parties as allow them to grow and seed, to the injury of the adjoining lands, the practice of clean agriculture in Ireland cannot, I fear, be hoped for;* because, if a farmer sees that the expense which he incurs in removing weeds is thrown away, owing to his careless neighbour poisoning the fields around with the seeds of noxious plants, he will naturally feel that it is hopeless to eradicate them, as they are replaced by the vigorous stock growing on his neighbour's holding. With a view to keep this subject before the agricultural community, I, last spring, issued a circular to the several Assistant Barristers, soliciting their aid. It was most courteously received, many of them having addressed the parties attending Quarter Sessions, on the great advantages which must arise, owing to the increased yield of land when kept free from weeds, as is clearly shown by the experiments of that eminent and distinguished man, the late Sir John Sinclair. [See page 25.]

So important has this subject become, that for an essay upon it a prize was awarded by the Royal Agricultural Society of England last year;—the successful author, Professor Buckman, of the Royal Agricultural College, Cirencester, gives the following practical methods for removing weeds from the soil:—

"*On the Extirpation of Weeds.*—The extirpation of weeds would appear "in *theory* a much easier matter than in *practice* it is found to be, for the "seeds of wild plants constituting weeds are so universally distributed, that, "though they may differ in kind at different places, yet, wherever a crop "will grow, there also will weeds flourish, if allowed. There would also "appear to be species of weeds peculiar to certain crops, species which "appear in one crop and not in another; the charlock is a familiar example "of this, as it will often make its appearance in great quantities after the "breaking up of pasture or old sainfoin lea, where it had not been observed "before for years. Evidence of this may also be obtained from the vast "quantities of wild plants which spring up in woods after trees and "underwood have been removed; so quickly and so abundantly, indeed, "as to convince us that their seeds must have lain dormant, only awaiting "the required circumstances to vegetate. Newly-formed earthworks fre- "quently cause the sudden growth of wild plants, which have never before "been observed in the district. Hence, however careful we may be to "destroy weeds in one crop, we shall assuredly have some fresh species "with the next, as well as fresh plants of the same, in consequence of "dormant seeds having been brought within the power of growth by "newly stirring the soil; from which it is obvious that weeds are not to "be eradicated by one effort, however vigorous it may be.

"The getting rid of weeds would appear to resolve itself into the two "following heads:—

"1st. *Destroying those already in the soil.*

"2nd. *Preventing others being sown.*

"The first of these must be considered with reference to those weeds "which are already rooted in the soil, that is, weeds of a perennial character, "as well as those annual weeds the seeds of which have been scattered at "different periods.

"Perennial and deep-rooted weeds can only be got rid of by properly "preparing the fallows, to which end farm-work should always be got as "forward as possible. One of the most common causes of the continuance "of weeds is, that work is delayed until it is time to get in the seed for "the crop, when untoward weather, want of time, or some other cause, "prevents the possibility of that thorough cleaning which is necessary to "get rid of weeds. *Seed is thus put into foul land, which must wait until "a more convenient season for being cleaned.*

"In the usual process of arable farming, preparation of the soil by "ploughing, scuffling, harrowing, and exposure to sunshine and drought, "clears the land of a great quantity of weeds; but if we observe the "depth to which the underground stems of couch, coltsfoot, bindweed, and "such-like plants penetrate, we shall see at once that this is not sufficient "to *exterminate the enemy*; but, having done this in the most careful "manner, we may observe that there are still spots left here and there in "a field where these weeds flourish. Now, it appears to me that the best "method of dealing with a case like this, is to go carefully over the ground "after the crop is removed, and dig up the weed-patches with a three- "pronged fork. With this implement they can be followed in their "direction and depth; and thus, by a simple employment of day-labour, "*these isolated nurseries of mischief* may, if not too numerous, be readily, "perfectly, and cheaply broken up. Indeed there is no mode so efficient "as this; and, from long observation of the natural history of weeds of "this kind in arable fields, I am convinced that more may be done by the "fork towards the complete eradication of deep-rooted weeds than by any "other means.

"There are some of these deep-rooted weeds which are exceedingly

"troublesome in pastures, such as the stinging-nettle, buttor-bur, and "bistort. Those occur in patches, some in the corners of the field, others "in wet places, while the bistort will be found occupying isolated spots in "the centres of meadows. These cannot well be attacked by digging them "up. The best plan of treating them is to regularly mow them down, "when their stems grow a few inches above the surface of the ground. "The principle upon which this is recommended is, that the leaves are "absolutely necessary to the extension of the whole of the parts of a plant; "if, therefore, these are continued to be destroyed in proper time, the "extinction of the underground stems is ultimately insured; it will not "do, however, to leave them until the usual period of mowing, as at that "time the plants will have advanced to maturity, and the leaf function "have been fully performed. An observance of this law will be of great "use in destroying many weeds, in situations where the roots cannot be "got at; let it simply be borne in mind, as *the leaves are the lungs of the "plant, never in such cases to allow the lungs to develope themselves.*

"*The prevention of Weeds-sowing.*—Weeds are constantly being sown "under many circumstances, the chief of which may be stated as fol-"lows:—

"*Weeds are sown with the seed for the crop.*

"*Weeds are spread over the land by manures.*

"*Weeds are perpetuated by being allowed to seed.*

"*Weeds are disseminated from road-sides, and waste land, or from a "badly managed farm to a good one, chiefly by 'flying seeds.'*

"*Sowing of Seeds.*—That weeds are perpetuated notwithstanding the "most careful preparation of the land, by sowing them with our seeds, is "a fact too well known to be disputed. Six years ago we saw a field "sown with foreign flax-seed, which came up full of black mustard,—"*Sinapis nigra*, much to the injury of the crop: this has ever since been "a troublesome weed in the field, and has even been the means of dissemi-"nating it over a great portion of a farm on which it was previously "almost unknown. Again, many weeds are sown with clover seeds, "sainfoin, and the like, which, though they may not make way during "the covering of the ground with the crop, may yet appear in some future "crop. From this it follows, that too much care cannot be taken to get "clean seed, and it wants but little botanical skill to detect the presence "of weeds in a sample. Pure or clean seed is even worth paying a greater "price for, as the reverse may entail trouble and expense for years. Any "mechanical processes, therefore, which can be made available for cleaning "seed are well worthy of patronage. A seedsman who will be careful in "the preparation and collection of seed deserves the best support. In "order also to assist in this matter, farmers should be particular *not to "allow a dirty patch to stand for seed, although it may be 'the most profit-"able thing they could do with it.'*

"*Weeds and Manure.*—It is too much the custom to consider that the "power of germination of seeds is destroyed by decomposition in manure "heaps. That some are so, when the manure has been thoroughly decom-"posed, there can be no doubt; but many are not, and with those that "are the process is too uncertain to be relied upon. We have seen quan-"tities of pulled docks and of crow-garlic thrown upon a heap to decay, "and afterwards noticed vetches manured therewith to be full of those "troublesome weeds. Neglected manure-heaps are often covered with a "profuse vegetation, which *thereon produce enough weed-seeds to stock a "farm.* In these cases the plants rendering the original seed were, doubt-"less, mixed with the straw of which the manure was made, and yet, "notwithstanding the vicissitudes they had to contend with, were not

"destroyed. Too much care, therefore, cannot be taken to prevent this "source of mischief, to which end it will always be found best to burn "pulled weeds; and in harvesting corn, docks, thistles, and the like, "should not be bound up with the sheaves, but, if practicable, left stand- "ing, and afterwards destroyed.

* * * * * *

"Weeding should be done as early as possible, either with the horse- "hoe, common hoe, or sometimes the Dutch hoe, and, when thus *early* cut "down, may safely be left to wither on the ground; but it should be "borne in mind that if any individual plants amongst them are shedding "their seed at the time, and are not taken away, the very hoeing insures "its safe plantation.

"It is precisely in this way that coltsfoot is often much increased. "The flowers of this plant appear in spring before the leaves. By the "time the seed is ripe the leaves become conspicuous; the hoe is then set "to work to cut down the latter, by which the ripened seeds are sown, "when, if left, they might have flown away to a distance. Now, it may "be that the roots of the coltsfoot—for it is not destroyed by the hoe— "are forked out after the crop has been gathered; but the sown seeds "will insure that the pest shall give us some more work to do at a future "time. The patches of coltsfoot flowers should, therefore, be cut down "as soon as they appear, and by this means we not only spoil the crop of "seeds, but cripple the growth of the plant by cutting off the leaf-buds. "Many other instances of a like kind might be adduced tending to show "that a knowledge of the natural history of weeds is of great importance "in enabling us to subdue them.

"*Dissemination of Weeds from Wastes.*—This is a matter that requires "serious consideration, and, having once obtained correct views upon the "subject, should incite to prompt and energetic action. It is well known "that some of the most pernicious weeds are to be found amongst the "*Compositæ*, a natural order of plants to which the *Sonchus*, *Leontodon*, "*Carduus*, *Tussilago*, *Senecio*, and *Centaurea* belong. Now, in all these "plants we may observe that their seeds are crowned with a feathery "down—the *Pappus* of botanists—which acts as a tiny parachute, en- "abling such seeds to be wafted here and there by the slightest breeze, "and thus they float for miles. It, therefore, follows that however par- "ticular we may be in trying to subdue them in our cultivated fields, yet "waste places and waysides, where many species like to dwell, if not "attended to will ever afford a nursery for many of the most objectionable "weeds. Waste places, therefore, on every farm—if there be such— "cannot too carefully be looked to in this matter; and, if the principle be "fully recognised, the keeping roads in order, especially in rural districts, "will comprehend *weeding the waysides*. We once saw a farmer employ men, "in a not over busy time, in mowing thistles on a good breadth of road run- "ning through the middle of his farm, but, unfortunately, the seed was ripe "when this was done, and, as the thistles were left where they fell, the "dissemination of their seeds was not prevented. This, therefore, is a "matter which seems to belong to the overseer of the road, and the plea "of idle time should never be recognised.

"But, unfortunately, it is not always that these evils emanate from "mere waste places and roadsides. One bad and dirty farmer may *preserve* "weeds enough to continue a supply to a wide range of neighbours; in "which case it would not seem unreasonable to call upon him to render "compensation for damages.

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"*The weeds of hedge-banks and fences* are innumerable: many wild

"flowers, not in our list, by growing in such situations, are weeds. Couch, "cleavers, bindweed, and bryony are among the most troublesome, espe- "cially when they occur in young quicks. To insure the growth of the "fence these must be removed, and, indeed, should never be suffered to "make head. This can be done with a small fork, handled with judgment, "so as not to disturb the roots of the hedge. By this means we may not "only remove the weeds, but the operation contributes to the fertility of "the soil, and thus the hedge more quickly overtops what, but for this "attention, would completely smother it. In this case, as in most others, "it is safer to burn what we remove than to remove it to the dungheap "or to let it lie about. We knew a farmer who offered his cottagers 3*d.* "the bushel for weed ashes; and as a description of the manner in which "a cottage family proceeded to make them may be useful and interesting, "it is here given:—The refuse of the garden was first put together in a "heap, and covered with turf from the roadside; this, on being fired, "burnt in a smothered manner; the children brought all the weeds and "refuse they could collect from time to time, and added it green to the "rest, and, by the occasional addition of turfs, a continued smothered fire "was kept up for weeks; in one cottage garden was as much as fifty "bushels, and the process still going on. With these ashes the farmer "always did well in his turnip crop, so that not only was an exterminating "warfare carried on with our enemies, but they were destined ultimately "to be converted into food; and we cannot better conclude this essay than "by saying—Always destroy the life and reproductive power of weeds, "even by fire, if necessary."

And on this subject, one of our most observant and popular authors, the late Mr. Charles Dickens, in a number of that useful periodical, 'Household Words,' after gracefully alluding to the exertions for the eradication of weeds, which were being made in Ireland, remarks:—

"Inasmuch, as Nature is resolved to spread her carpet where she can, "and man knows very well that the green carpet with its pretty little "flower patterns, must be taken up wherever the ground is to be tilled for "special uses of his own, the need of constant watchfulness is obvious "enough. To say that over a given space there shall grow nothing but "wheat, if we mean earnestly what we are saying, is to declare war "against all other growths which set up their own claims to the same "land. It is a case of war arising out of territorial aggression. The "farmers seize upon a territory occupied by various races of plants known "to them by the rough general name of The Weeds. The weeds are got "under, subdued, in a great measure extirpated, and the farmers then set "up an iron rule over the soil, upon which they establish in rich colonies "their own subjects, the cereals and green crops. The farmers justify their "first aggression. The well-being of mankind depends, they say, on the "predominance of the two races of cereals and green crops. What do the "weeds care for this reasoning? The race of man has always trampled on "them. They are the first owners of the soil. They claim it. They "watch, therefore, the opportunity to rise, and every great rising of the "weeds is attended with a frightful massacre of the new race. There is "no mercy shown even to the newly born, whether of the green crops "or the cereals. Thousands upon thousands of them are without pity "smothered by the weeds, while others perish in their prime.

"Let us observe the common case of a fortified town in possession of

"a cereal colony, such as we may take a wheat field to be, walled with its "hedges, moated with its ditches, and having its one or two great gates "kept carefully closed. Not only is it frequently in England, and almost "invariably in Ireland, plagued by the insubordination of the weeds allowed "to live within its bounds, and to lie there at the root of general society; "but it is, every summer, regularly besieged by ragged regiments. There "are the chickweeds, the hawkbits, the thistles, with their white plumes "waving and their lances shouldered, the poppies, reddest of republicans, "the black mustards, whose family, perhaps, has caused more tears to be "shed than any race, except that of the onions. There are the nettles "with their poisoned barbs, the dandelions each with fire upon his head. "These storm the field, master the outworks, and do not a little mischief "to the regiments that lift their shining spears within. * *

"It would appear that we are within the truth in saying that, where "the weeds are not kept under, there is a loss incurred of one-fourth of the "crop. The weeds rob the growth with which they are mixed of some "part of the food which the ground holds for the use of plants; they clog "the ground mechanically; they keep air and light from the young seed; "they injure the crop seriously when there is high wind or heavy rain; "they delay the processes of harvesting and stacking; and, by so doing, "increase the farmer's risk; while the grain that has ripened under all "these disadvantages, goes to the stack worse corn than it would have been "had it been grown unaccompanied by weeds.

"The suppression of weeds has been considered in France a duty not "unworthy of being enforced by law. A French farmer may sue his neigh- "bour who neglects to destroy the thistles upon his land at the proper sea- "sons, or he may employ people to do it at his neighbour's cost. In "Denmark, there is a law to oblige farmers to root up the corn-marigold. "The oldest regulation against the corn-marigold was, probably, that in a "Statute of Alexander the Second of Scotland; which, in or about the year "1220, denounced that man to be a traitor who poisons the King's lands "with weeds and introduces into them a host of enemies. Bondsmen who "had this plant in their corn were fined a sheep for each stalk, and a Scot- "tish baron held what were called Goul Courts, for the purpose of fining "farmers in whose growing crops three or more heads of corn-marigold "could be detected.

"In modern times a clause of a Bill which enforced the extirpation of "weeds in hedges and along roadsides, passed our English House of Com- "mons, but was thrown out by the Lords. Yet it is possible that great "advantage might result from one or two legal provisions of this kind. "The loss by weeds in England is not very great; in Ireland the fields are "overrun with them." * * * * * *

At the meeting of the Royal Agricultural Improvement Society, at Waterford, the following earnest and emphatic observations, which cannot fail to have a most beneficial effect, were addressed by His Excellency to a large and influential assemblage of landed proprietors and agriculturists:—

* * * * * * * *

"I know that the total extinction of weeds must be a work of time, "and of gradual and continued effort, like all other great works;—but "Delhi has not yet fallen—and Irish weeds are not yet extirpated; and "I believe the one to be as essential to the real regeneration of Irish "Agriculture, as the other is to the martial glory and stability of the "Empire."

The following Circular was addressed to the Magistracy, the Clergy of all Denominations, and other influential parties in Ireland, when sending them the Abstracts of Tillage and Live Stock. It was most favourably received, and I now reprint it:—

Agricultural Statistics Office,
5, Henrietta-street, Dublin,
October 20, 1856.

SIR,

In forwarding to you the accompanying abstracts and observations on the extent of Tillage and Number of Live Stock in Ireland, in 1855 and 1856—which I trust you will find interesting—I would earnestly solicit your attention to my remarks in reference to the extraordinary, and almost incredible growth of Weeds which is permitted along the sides of Public Roads, Railways, and Canals, as well as on the farms of Ireland. I say almost incredible, for it would be quite so, did not our every-day experience of their condition in this respect, convince us of the fact:—so important, indeed, has the subject become, that it has called forth the marked observations of His Excellency the Lord Lieutenant, at the late Cattle Show of the Royal Agricultural Society at Athlone, as well as on former occasions; also of Her Majesty's learned Judges of Assize, and of the Grand Juries of almost every county in Ireland, during the late circuits. It may be truly said that a great social evil has imperceptibly grown up amongst us, until at length the attention of a large portion of the community has been turned towards it, with the view of finding a proper and permanent remedy: this happily, is within our reach; for, if the *landed proprietors, the resident gentry, and the clergy of all denominations, aided by the intelligent and improving Tenant Farmers of the country*—who are themselves the greatest sufferers from the present lamentable apathy and neglect—will only act upon the advice of His Excellency, and of Her Majesty's learned Judges, I feel I am not too sanguine in expressing my conviction that, in a few years, a most propitious change will have taken place, and the surface of this beautiful Island—now covered in so many places by large masses of thistles, rag-weed, and of yellow, scarlet, and other noxious weeds, which are permitted to grow and thrive, and scatter their baneful seeds far and wide—would then become what Providence designed her, and we now vainly boast her to be—the "Emerald Isle."

The extracts which I have given in the accompanying Report from the writings of that true patriot, Sir John Sinclair, clearly prove *the great pecuniary loss arising from neglect in weeding cereal crops.* There is, however, another reason for weeding them, quite distinct from the important national question of *the loss in yield*,—which must attract the notice of every person who is not already familiar with it. I allude to the acute pain caused to the laborious reapers of our harvests, *when grasping the corn in the act of reaping*, by which, if the crop abounds with thistles and other prickly weeds, as is too frequently the case, the hands of the reapers are severely wounded. I have myself made inquiry from several parties of reapers from various counties, and from all of them I learned, that they would much sooner cut down and bind an acre of corn free from thistles and other weeds for *four* or *five shillings* less than they would a "dirty" crop—the reason invariably given being the additional time occupied in cutting down the latter, and the injury done to their hands by grasping the prickly weeds when reaping;—to use their

own expressive words, "their hands were often so festered and destroyed by thistles, that they had to give up their work."

I would beg, therefore, to observe, that *Self Interest*,—by obtaining an increased yield (as clearly shown in the writings of Sir John Sinclair, from which I have quoted); *Economy*,—even on *small* farms—as the children of the farmers might, in the spring season of the year, when the weeds are tender, assist in cleaning the crops, and thus aid in economizing the additional four or five shillings an acre, which, as I have stated, are paid for reaping "*dirty crops*;" but not least of all, *Sympathy for the poor reaper and binder* of our harvests, will, I most respectfully venture to hope, insure the co-operation of all classes, and the continued aid of the public press, in the attempt now being made to draw attention to the importance of destroying weeds in Ireland.

My observations have been hitherto confined to the great loss and injury caused by neglect in weeding *cereal* crops; but it must be evident to every one that an equal, if not greater, amount of damage arises in many counties from the *shedding of the thousand seeds* of thistles and other noxious plants, which is but too generally permitted on the *grazing farms* of the country. I feel I am warranted in stating that the owners or occupiers of these grass lands are usually indifferent on the subject, and object to the expense of destroying weeds, asserting that they do *themselves* no injury. Although these parties may not be sensible of their loss, yet it cannot be denied that THEIR NEIGHBOURS, the unhappy tillage farmers, for miles around, suffer from the seeming neglect of the opulent grazier. Does not this state of things require a remedy? Why, I would beg to ask, should not Ireland rival England and Scotland in the care of her crops?—or why should she be behind that best of agricultural models—Belgium? Happily this is *not a political or party question*, but one in which all may cordially unite for the benefit of our common country; and therefore it is that I respectfully ask for your influence and friendly co-operation to aid in eradicating weeds from the farms of Ireland. To those who feel an interest in the progress of the country, it will, no doubt, be gratifying to learn that instruction as to the *importance of destroying Weeds* will in future form part of the educational course in the National schools, as well as in those in connexion with the Church Education Society and other influential bodies; from which it is to be hoped much benefit may arise to the farming classes of the country.

I take this opportunity of stating how deeply sensible I am of the kind and valuable assistance afforded to me, during the last six years, by the magistracy and clergy of all denominations, and by the public press of Ireland, in reference to the collection of these statistics. It also affords me the greatest satisfaction to express my obligations to my intelligent fellow-countrymen, the Tenant Farmers of Ireland, for their generous confidence, and the readiness with which they have given to the Enumerators the required information respecting their Stock and Tillage—an honourable example, well worthy of imitation by the farming classes in England.

I trust the importance of the subject to which I have now taken the liberty of calling your attention, will plead my excuse for troubling you at such length.

I am, Sir, your faithful servant,

WILLIAM DONNELLY, *Registrar-General.*

To ———

The following extracts on the subject of the almost incredible growth of weeds which prevails in Ireland, are taken from the "Leisure Hour" for the months of May and June, 1873:—

IRISH AGRICULTURE.

"Every traveller must be astonished at the neglect and waste of natural resources. Even in the pasture lands, in which Ireland most excels, the spontaneous liberality of the soil seems to induce the greater indolence and carelessness. The aid of art has been little used in laying down land to grass, for it is only recently that the trade in grass seeds has assumed any dimensions. Hay-making, as generally conducted, is a slovenly operation, though labour has been so abundant. Cut too late, I saw the grass often left in small cocks, to be drenched by the autumn rains. A good sweet hay-stack is the exception, not the rule, on an Irish farm. I never saw such a country for weeds. I saw two men in a field with scythes mowing down ragwort. Had I been travelling afoot or in a car, and not in a railway carriage, I would have sought an explanation of so strange a sight. Had the ragwort been sown as a crop, it could hardly have been closer, so as actually to be mown with scythes. Is it used as fodder for any Irish animal? I suspect it was only an extreme illustration of the miserable state of the agriculture too common in Ireland. The amount of weeds is a national disgrace. It is not uncommon to see a ton of weeds in a dozen tons of hay. Many a field has more weeds than a whole parish in England. Small tenants keep land without laying it down with grass seeds, and it becomes the receptacle for all the floating weeds of the district, and then spreads them far and wide. Even for green crops the land is seldom sufficiently cleaned. Smoking heaps of twitch and weeds are rarely seen. If the farmer would give a small reward to boys for heaps of weeds, as they used to do for heads of vermin, they could keep this nuisance under. Ragwort, for instance, can easily be pulled up by the roots in wet weather, and the boys from the workhouse school would gladly attack a field for a trifling reward, and enjoy the fun of the bonfire that the heaps would make. But fields and road-sides are alike neglected, and weeds help to keep Ireland green but poor. *I am sure it is no exaggeration to say that the direct loss to Ireland from weeds is above a million and a half sterling. I have heard the loss estimated at nearly double that amount.* On the drainage of land vast sums have been expended, and under good management with wonderful results. But even in land that has been drained there is too general carelessness in scouring ditches and keeping the outlets of drains clear. It is better to have no drains than drains choked. In this matter, as in the curse of weeds, the careless, indolent habits of the people make agricultural progress up-hill work. Bad fences are also everywhere evident. The direct losses from the destruction of produce through this cause are enormous, and it is a constant source of litigation and ill-will. Want of industry and want of sense account for all the backwardness of Irish husbandry."—*Ireland in* 1872 : *a Tour of Observation. By Dr. Macauley, Editor of the "Leisure Hour."* (H. S. King & Co.)

The following remarks on the subject of weeds in Ireland are extracted from the *Freeman's Journal*:—

29th September, 1873.

"We think Mr. Donnelly has done good service in republishing, as an "Appendix to his Agricultural Statistics, a collection of opinions on the "poverty caused by the universal flourishing of weeds throughout this "country. It is impossible to deny the accuracy of the statement that, "*so far as weeds are concerned, Ireland is the wealthiest country in the "world.* If we walk by a rural river, we see the bed covered with weeds "taller than a man. If we look at those useless and wasteful ditches "which divide one farm from another, the glaring yellow of the blooming "weed meets the eye everywhere. If we glance at the slopes which run "along a line of railway, we can see the noxious weed in full vigour. "Fine crops are smothered by the myriad seeds which are borne along "on every wind. *The good farmer is worried and deprived of the just "fruits of his skill and labour by the mere fact of bad neighbourhood.* "The evil is almost universal. Every visitor to the country notices it, "wonders at it, complains of it. Every book of observation taunts us "with our slovenliness in this inexcusable matter; we dare not deny the "fact, and we do nothing to remove the blot. Mr. Donnelly quotes Sir "John Sinclair, Lord Carlisle, Charles Dickens, Dr. Macauley, and the "*Freeman's Journal*, in support of his 'CRUSADE AGAINST WEEDS.' For "our part we trust his efforts, which in this direction have been un- "ceasing, will have proper influence in enlisting the landlord, the county "surveyor, the police and the people in a compact force which shall "have for purpose the extirpation of this scandalous reproach."

8th July, 1874.

"Now, that the Grand Juries of Ireland are being assembled for the "despatch of their important public duties, it is not an inopportune "time to call the attention of those influential bodies to a matter which, "though frequently brought before them already, has not hitherto "received that serious and practical consideration to which it is entitled. "We refer to the prevailing negligence which still allows a vast growth "of weeds to deface the agriculture of the country, and to mar in a "degree much larger than is popularly known the results of the cultiva- "tion of the soil of Ireland. The returns of our capable and careful "Registrar-General, Mr. Donnelly, furnish some very striking figures "on this head. In this gentleman's annual report we are able to trace "the consequences of a defect of system which has been long the blot of "Irish farming. It is evident to any person of observant habits who "may chance to pass through three-fourths of the island that the farm- "ing of the land is to a great extent slovenly and wasteful. Not only "are weeds allowed to flourish rankly in the ditches, the divisions of "fields, in furrows and between drills, but they are all too often per- "mitted to grow with the crop, stifling it with their luxuriance, and "absorbing its nourishment from the soil, till, when at last an effort is "made to remove them, the growing plants show starved, sickly, and "discoloured. We do not want to exaggerate. There is a good deal of "good farming in this country—the spirit of enlightenment has spread "and is spreading—but there is more backwardness than there ought "be, above all in the indifference with respect to the worst enemy of "legitimate vegetation—the weed. Nothing is more common than a "young cornfield the natural green of which is converted into flaming

"yellow by the preponderance of foreign growths. Potato patches are "found equally dirty. *A particular fault, arising from a most hurtful* "*misapprehension is the custom of leaving the weeds to remain till they* "*have grown thick enough and large enough to make it a chance that* "*the one weeding may clean the field.* But before they have reached "this stage, permitted them by a custom highly characteristic of the "rude, happy-go-lucky methods of old farming, they inflict the most "serious injury on the crop. There is another grave blemish on our "agriculture. The gigantic ditches, the vast dykes and cuttings, the "wide roadside traverses, which abound in Ireland are found nowhere "else. But, besides the waste of surface caused by these, there is a more "deliberate loss in the 'headlands,' which are left to lie untilled at the "ends of the sown or planted ground. The whole subject has been so "often discussed that it may seem a wearisome iteration to refer to it "now; but we are induced to do so by the fact that we have recently "received letters from tourists and visitors to Ireland which we are "absolutely ashamed to publish, so strong are they in comment upon "our want of thrift, neatness, and cleanliness in our farming. One "correspondent, who is not, by the way, a stranger, is of opinion "that much of the remedy lies with the Grand Juries, or those who "compose them. These gentlemen may be taken as enjoying a large "amount of influence in the localities they represent. It is in their "power to impress upon those in their employment, as well as upon their "tenantry, the lesson of clean farming and full cultivation of as much "of the ground in their occupation as they can put a plough-socket or a "spade in. The law calls upon road contractors to remove weeds from "the roadway, and this they ought be careful to do. They might set "a good example also upon their own farms. Another correspondent "suggests, with a great deal of sound reason, that our public bodies, "such as railway companies, who hold a large extent of land in their "possession, might help to spread proper ideas upon this most impor-"tant subject. As it is, the amateur horticulture and agriculture of the "railway companies exhibit a disagreeable anomaly. Attached to some "wayside station, the platforms and buildings of which are beautiful "with wealth of well-tended roses, there may be found a plot of corn or "potatoes, or vegetables, a very eye-sore for weeds and dirt. As a "matter of fact, the loss caused by weeds and waste is immense. English "periodicals have described the weeds in Ireland as 'a national disgrace.' "Mr. Donnelly's reports substantiate the reproach. This is an evil, "and a real one, and we think that the Registrar-General deserves the "most emphatic acknowledgments for his incessant, unwearied, and "zealous efforts to end what is not only the greatest blot on Irish agri-"culture, but the greatest impediment to its development and prosperity. "He has recommended that children at school be instructed in the "necessity of destroying weed. This is an excellent advice, and ought "be made a specialty of the National School teaching. When it is known "that *the loss to Ireland annually from weeds alone is estimated at from* "*one and a half to three millions sterling,* our readers will own that the "commendable action of the Registrar-General ought to be earnestly and "energetically seconded by all who have at heart the interests of the "nation."

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